PMC-D407L

SERVICE MANUAL

AEP Model

Ver 1.0 1998. 09

CD Section	Model Name Using Similar Mechanism	PMC-D307L
	CD Mechanism Type	KSM-213CDM
	Optical Pick-up Name	KSS-213C
Tape Section	Model Name Using Similar Mechanism	PMC-D307L
	Tape Transport Mechanism Type	MF-D307

SPECIFICATIONS

CD player section

System
Compact disc digital audio system
Laser diode properties
Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 µW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
2
Frequency response
20 - 20,000 Hz +1/–2.5 dB
Wow and flutter
Below measurable limit

Radio section

Frequency range

FM	Except Italian model	87.6 - 107 MHz
	Italian model	87.5 - 108 MHz
MW		531 - 1,602 kHz
LW		153 - 279 kHz

IF
FM: 10.7 MHz
MW/LW: 450 kHz
Aerials
FM: External aerial terminal
MW/LW: External aerial terminal

Cassette-corder section

Recording system
4-track 2-channel stereo
Fast winding time
Approx. 130 s (sec.) with Sony cassette C-60
Frequency response
TYPE I (normal): 40 - 15,000 Hz

Super woofer

Speaker
Woofer: 10 cm (4 in.) dia., 4.0 ohms, cone type
Power output
30 W (at 100 Hz)
Power consumption
AC 30 W
Dimensions (incl. projecting parts)
Approx. 210 × 210 × 247 mm (w/h/d)
(8 3/8 × 8 3/8 × 9 3/4 inches)
Mass
Approx. 4.1 kg (9 lb. 1 oz.)

– Continued on next page –

PERSONAL COMPONENT SYSTEM

MICROFILM

SONY®

General

Speaker
- Full range: 8 cm (3 1/4 in.) dia., 6.0 ohms, cone type × 2

Input
- LINE IN jack (stereo minijack)
- Minimum input level 250 mV

Outputs
- Headphones jack (stereo minijack)
- For 16 - 68 ohms impedance headphones
- LINE OUT jack (stereo minijack)
- Rated output level 440 mV at load impedance 47 kilohms
- Optical digital output (optical output connector)
- Wave length: 630 - 690 nm

Maximum power output
- 10 W + 10 W

Power requirements
- For personal component system: 230 V AC, 50 Hz
- For remote commander: 3 V DC, 2 R6 (size AA) batteries

Power consumption
- AC 35 W

Dimensions (incl. projecting parts)
- Player: approx. 130 × 211 × 200 mm (w/h/d) (5 1/8 × 8 3/8 × 7 7/8 inches)
- Left speaker: approx. 130 × 210 × 235 mm (w/h/d) (5 1/8 × 8 3/8 × 9 3/8 inches)
- Right speaker: approx. 130 × 210 × 200 mm (w/h/d) (5 1/8 × 8 3/8 × 7 7/8 inches)

Mass
- Player: approx. 1.7 kg (3 lb. 12 oz.)
- Left speaker: approx. 3.2 kg (7 lb. 1 oz.)
- Right speaker: approx. 1.6 kg (3 lb. 9 oz.)

Supplied accessories
- Remote commander RMT-C305AD (1)
- FM lead aerial (1)
- MW/LW loop aerial (1)
- Audio connecting cord (2)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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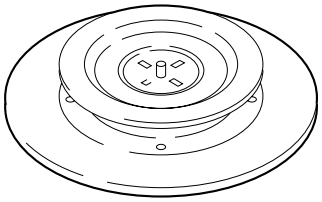
SECTION 1
SERVICING NOTES

CHUCK PLATE JIG ON REPAIRING

On repairing CD section, playing a disc without the lid (CD), use Chuck Plate Jig.
• Code number of Chuck Plate Jig: X-4918-255-1



NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

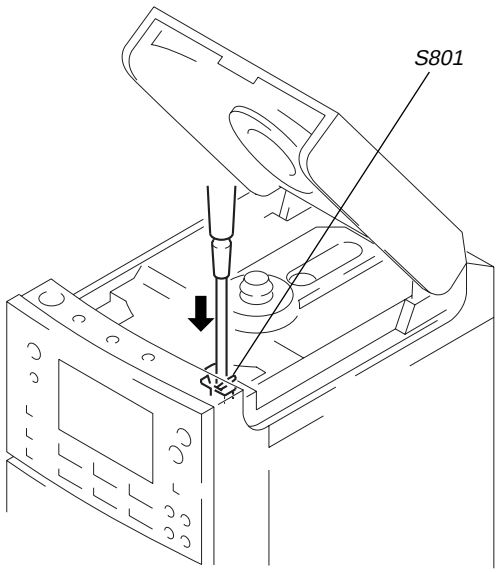
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT table is location on the rear exterior.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

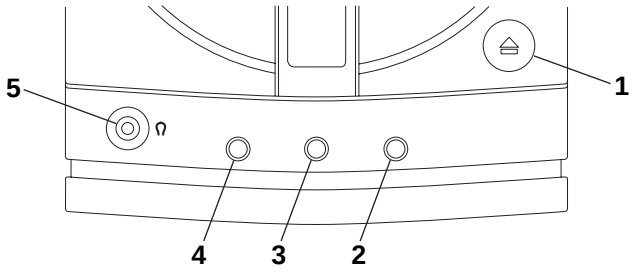
1. Turn OPERATE switch on with to disc inserted and press FUNCTION button to CD position.
2. Open the lid (CD).
3. Turn on S801 as following figure.
4. Press the ► (CD) button.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
   Objective lens moves up and down three times for focus search.



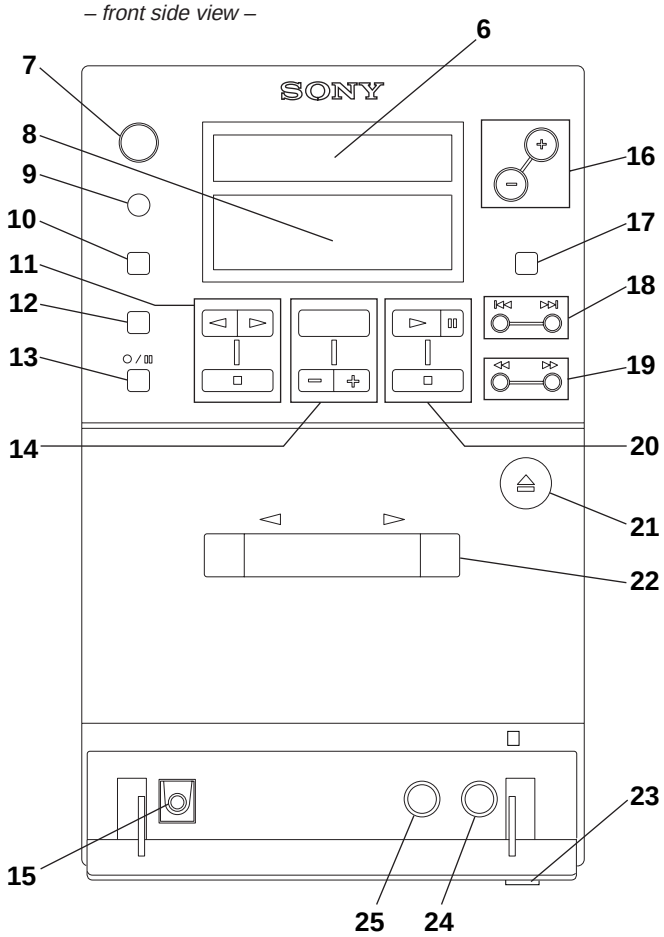
SECTION 2
GENERAL

2-1. LOCATION OF CONTROLS

– upper side view –



– front side view –



1. ⏏ PUSH OPEN/CLOSE button (CD)
2. PLAY MODE MONO/ST ISS button
3. PGM SET AUTO PRESET button
4. SOUND button
5. ∩ (Headphones) jack
6. RDS display window
7. OPERATE (power) button
8. Display window
9. Remote sensor window
10. FUNCTION button
11. TAPE operation buttons
    ◄ (Reverse side playback) button
    ► (Front side playback) button
    ■ (Stop) button
12. DIR MODE button
13. ●/❚❚ (Recording/pause) button
14. RADIO operation buttons
    BAND button
    PRESET – button
    PRESET + button
15. OPTICAL DIGITAL OUT (CD) jack
16. VOLUME +/– button
17. DISPLAY ENTER/MEM button
18. I◄◄ /►►I, TUNE –/+ button
19. ◄◄/►► button
20. CD operation buttons
    ► (Playback) button
    ❚❚ (Pause) button
    ■ (Stop) button
21. ⏏ PUSH (cassette holder open) button
22. Cassette holder
23. OPEN ▼ knob
24. LINE OUT jack
25. LINE IN jack

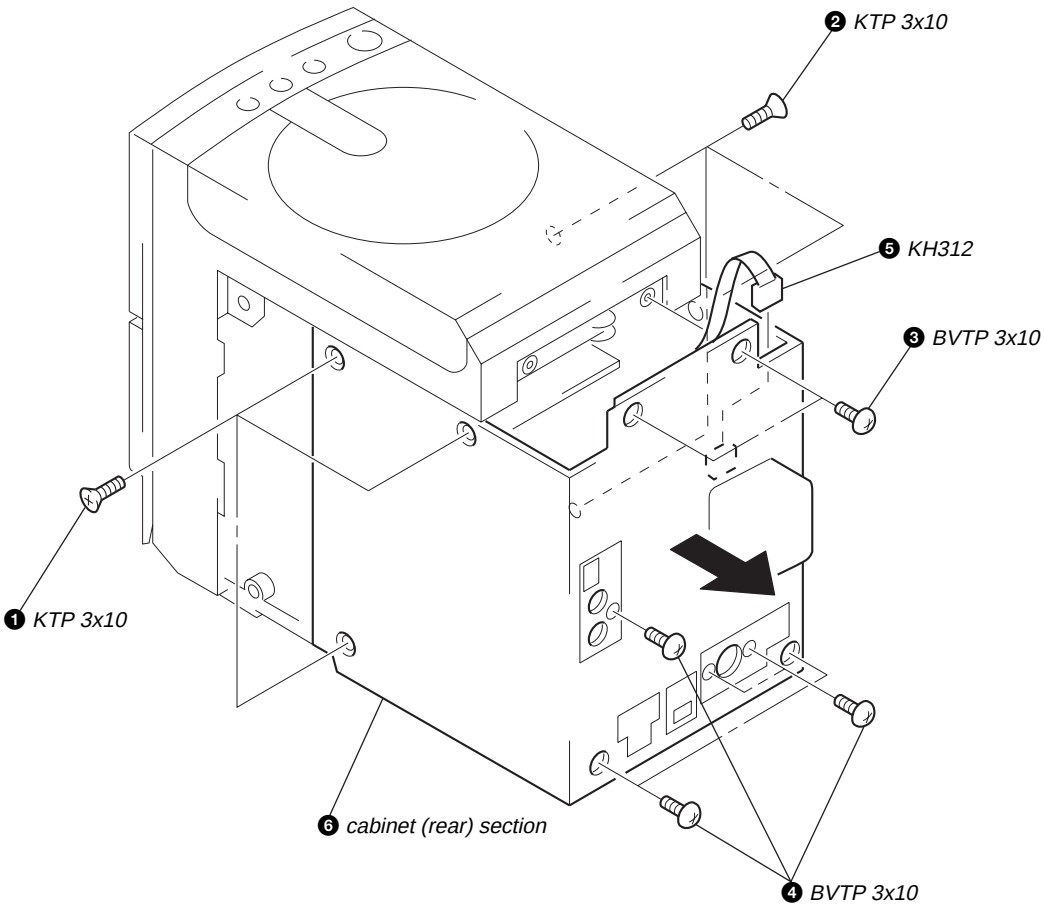
SECTION 3
DISASSEMBLY

• The equipment can be removed using the following procedure.

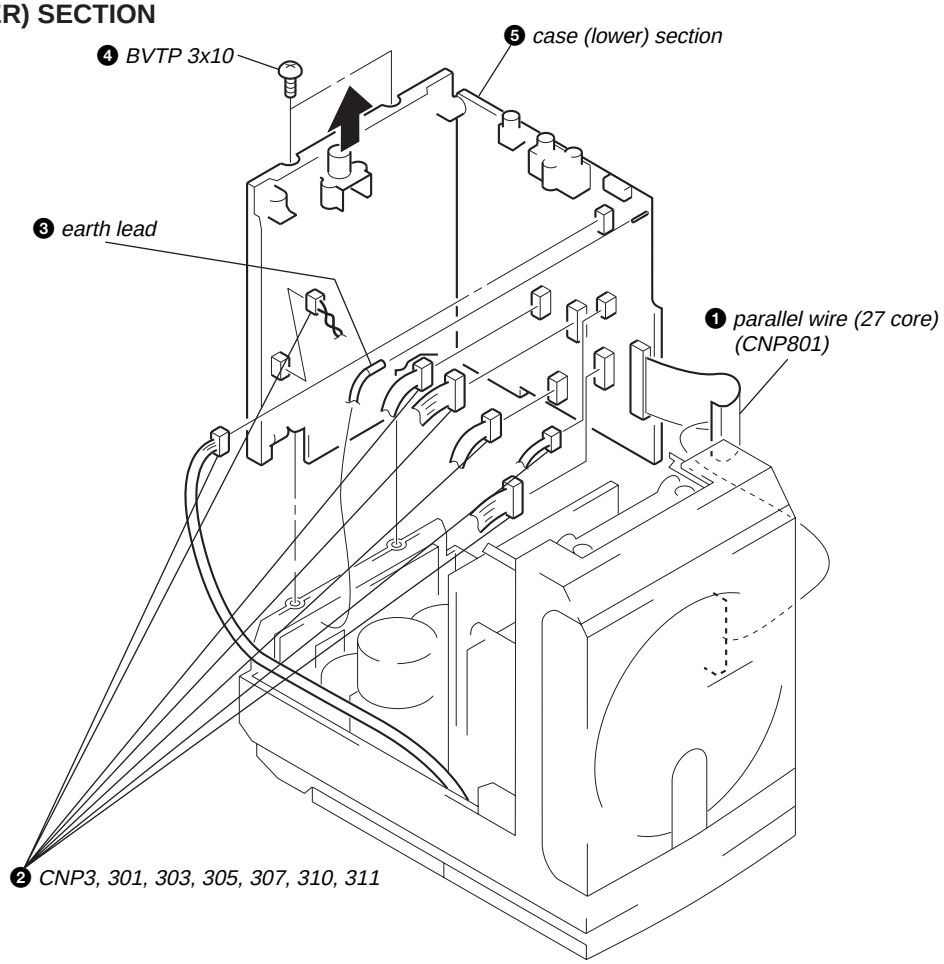
Set ➡ Cabinet (rear) section ➡ Case (lower) section ➡ Cabinet (CD) section ➡ CD, System board ➡ RDS board, LCD section
Optical pick-up section
Tape mechanism deck, Line board
Rear chassis (speaker) assy ➡ Power Amp, Terminal, Jack board ➡ Power board
Rear chassis (woofer speaker) assy ➡ S/Woofer Amp board ➡ Woofer power board

Note : Follow the disassembly procedure in the numerical order given.

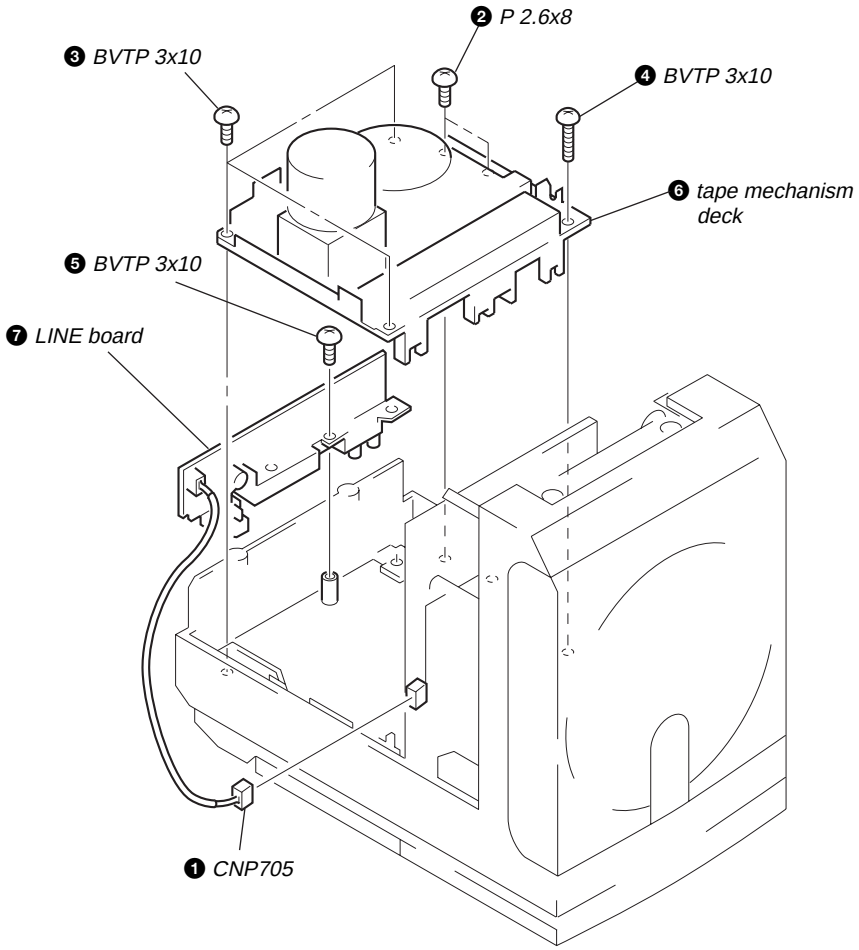
3-1. CABINET (REAR) SECTION



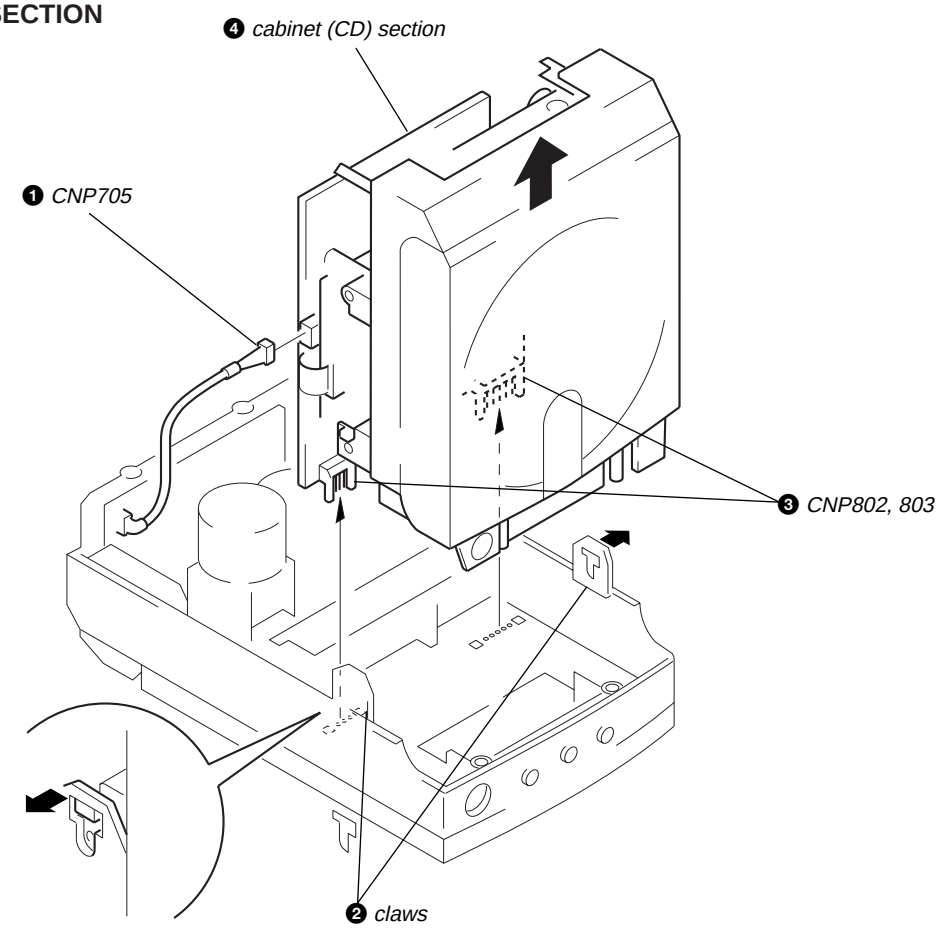
3-2. CASE (LOWER) SECTION



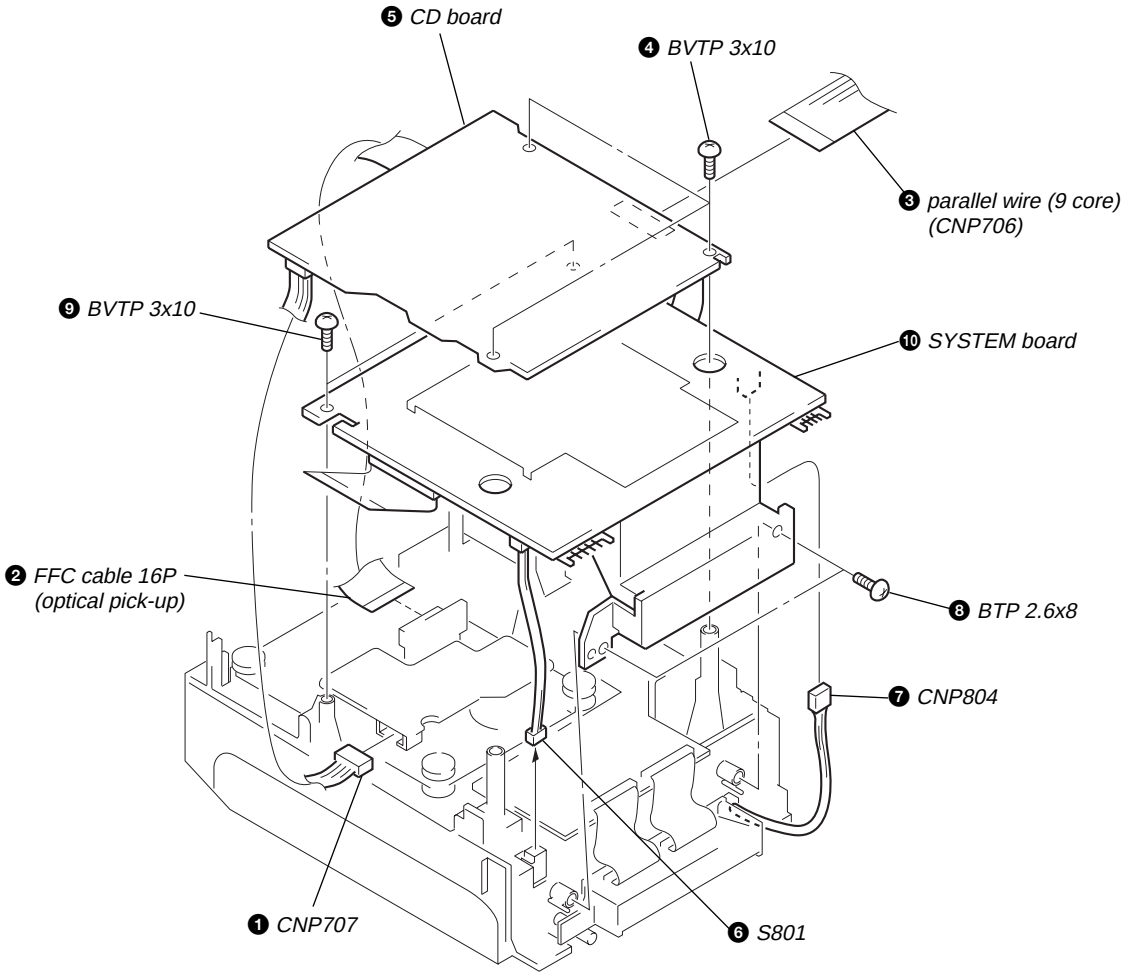
3-3. TAPE MECHANISM DECK, LINE BOARD



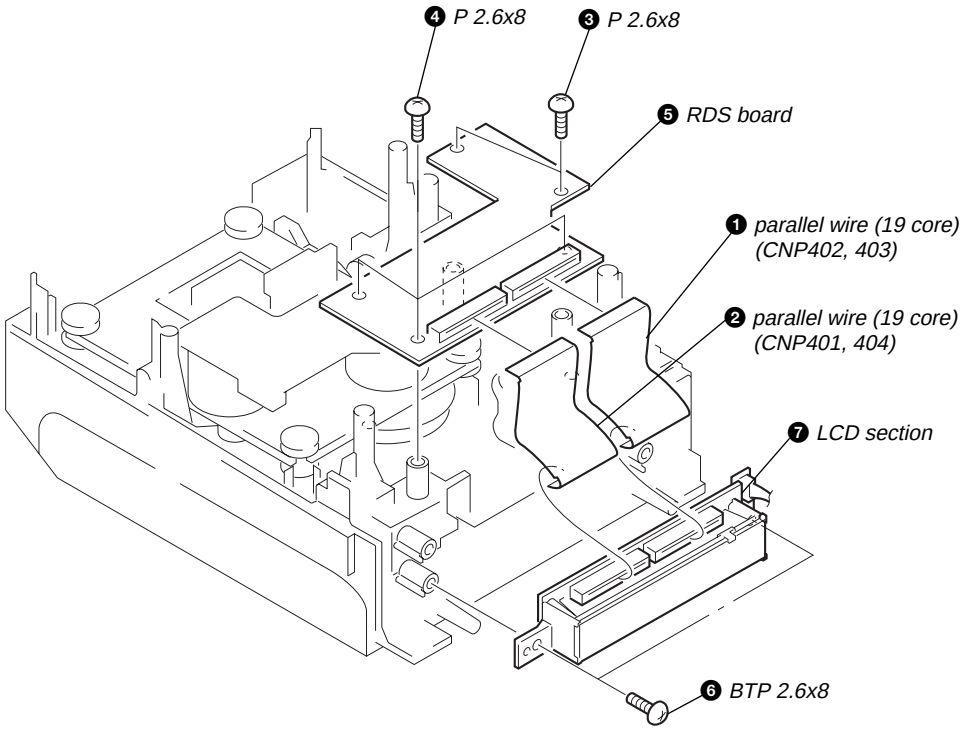
3-4. CABINET (CD) SECTION



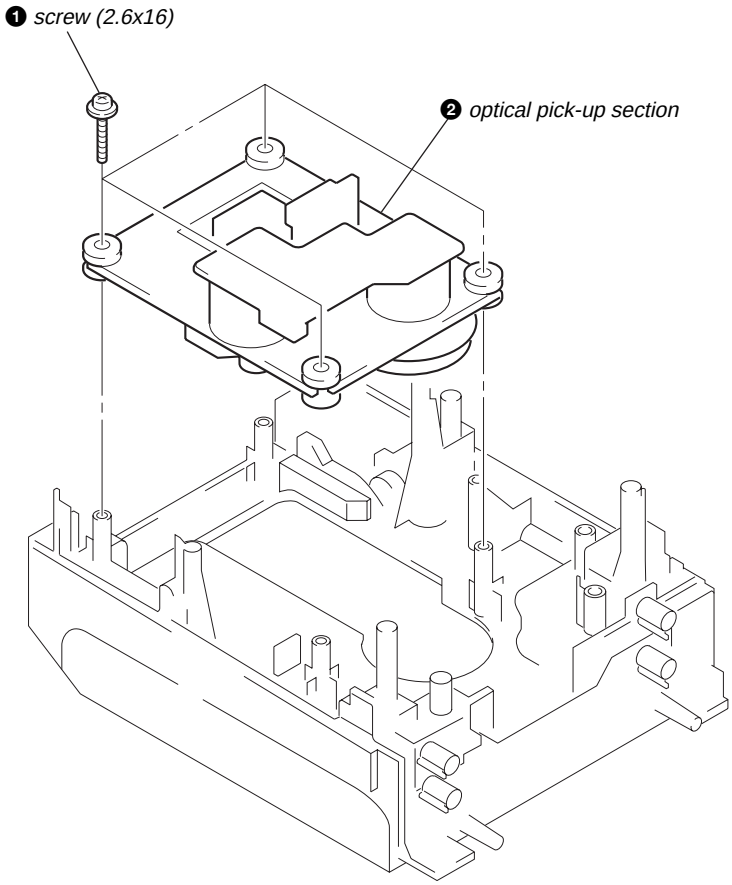
3-5. CD, SYSTEM BOARD



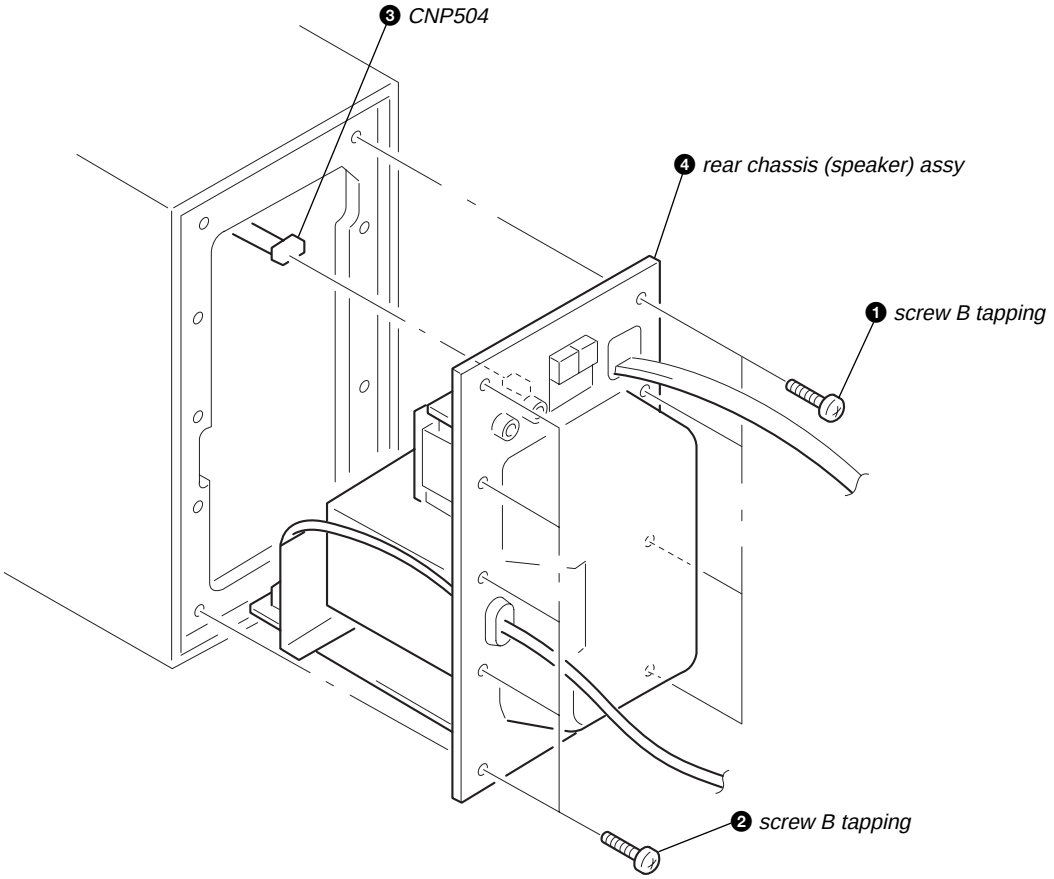
3-6. RDS BOARD, LCD SECTION



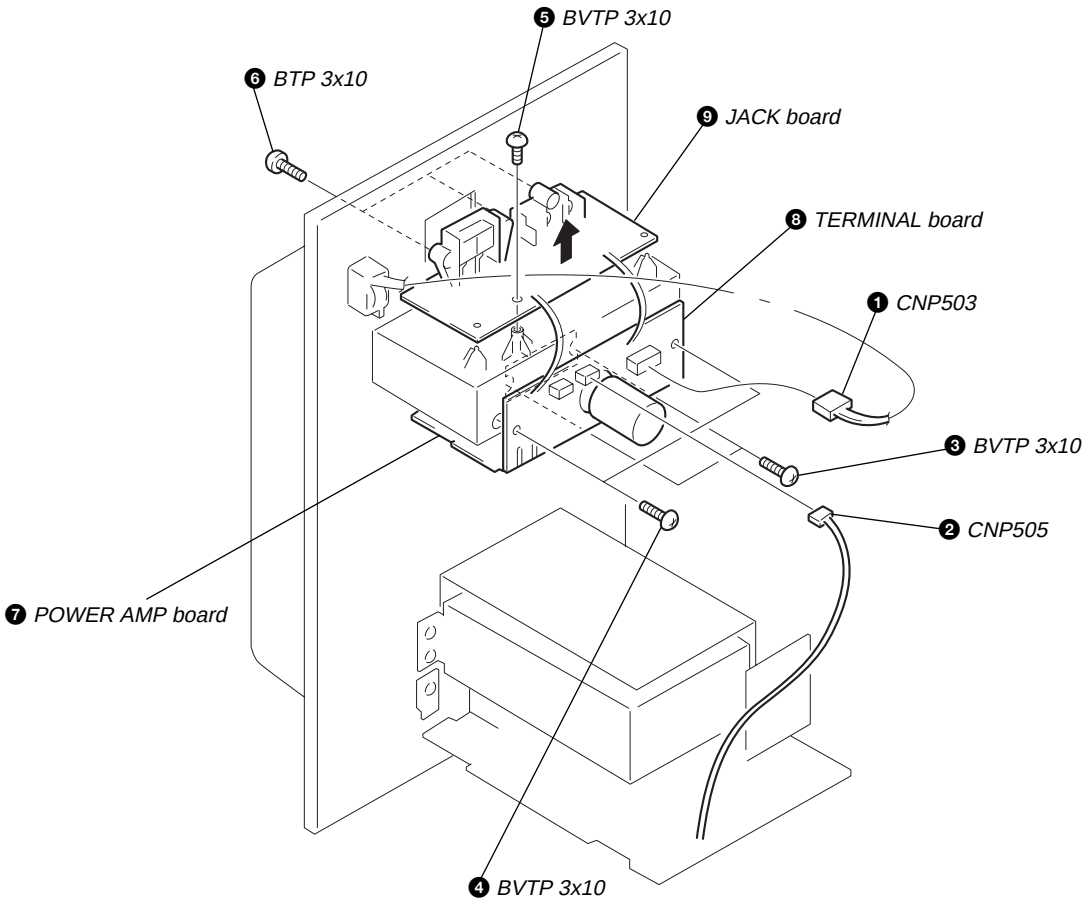
3-7. OPTICAL PICK-UP SECTION



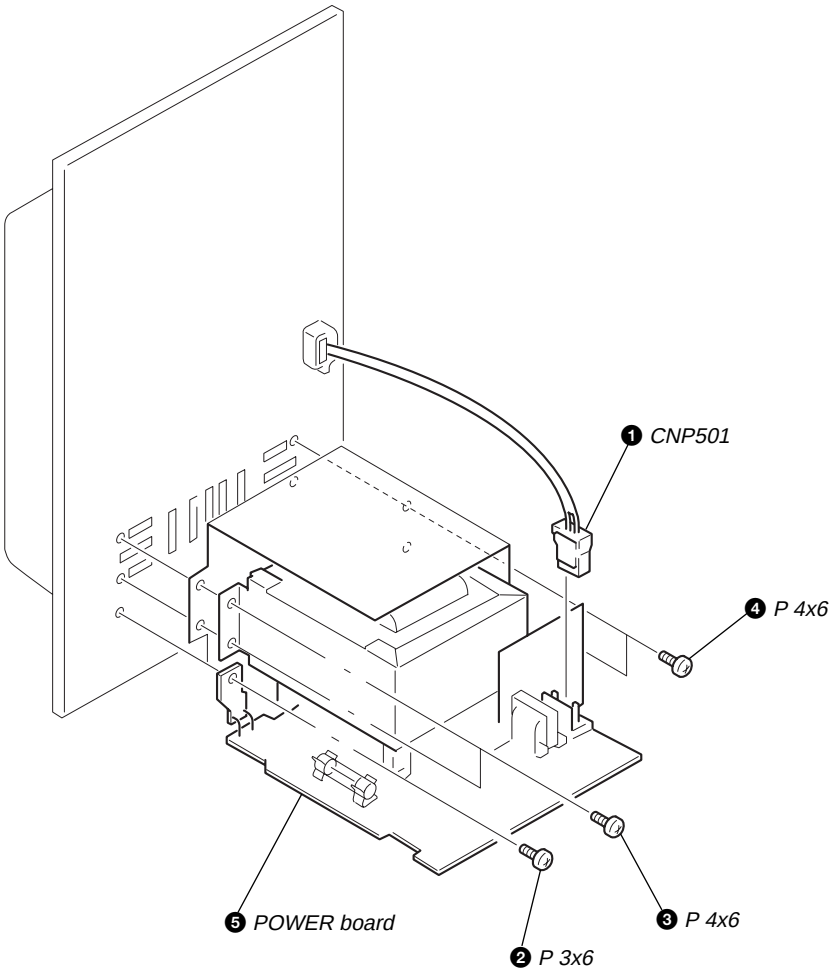
3-8. REAR CHASSIS (SPEAKER) ASSY



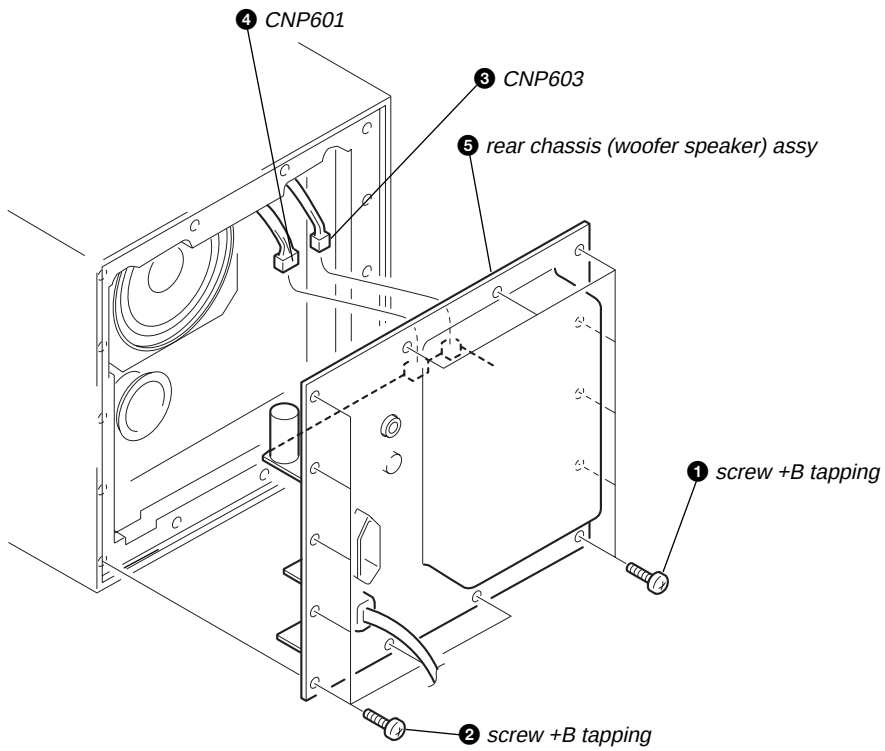
3-9. POWER AMP, TERMINAL, JACK BOARD



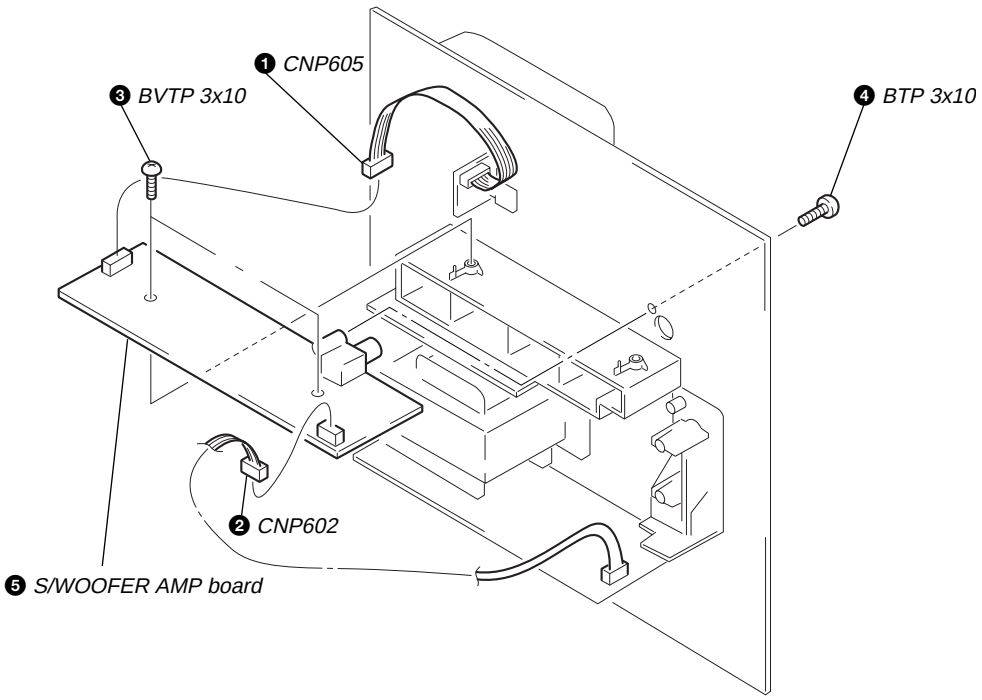
3-10. POWER BOARD



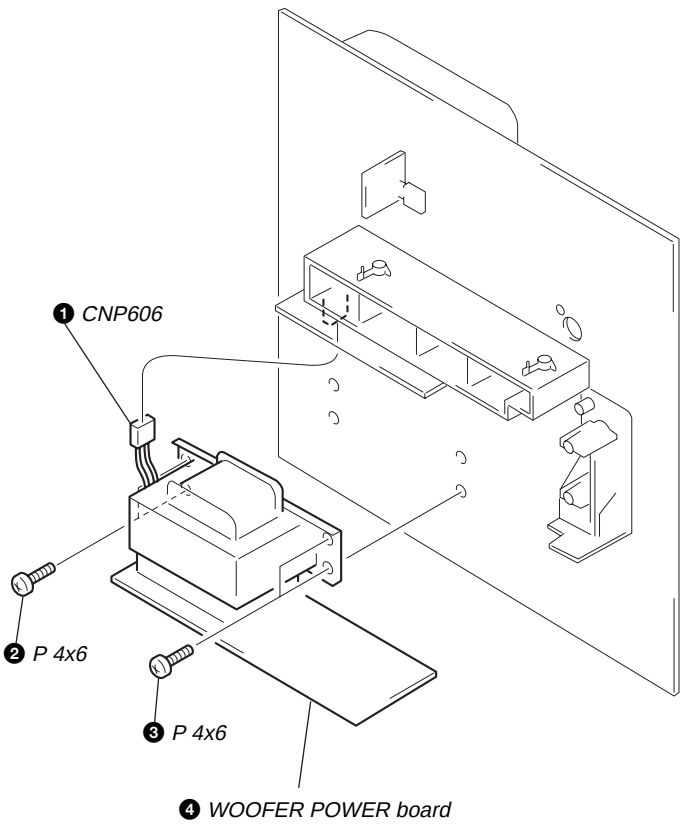
3-11. REAR CHASSIS (WOOFER SPEAKER) ASSY



3-12. S/WOOFER AMP BOARD



3-13. WOOFER POWER BOARD



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback/erase head, pinch roller, rubber belts, capstan, idlers
2. Demagnetize the record/playback/erase head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	30 – 70 g•cm (0.42 – 1.02 oz•inch)
FWD Back tension		2.0 – 6.0 g•cm (0.028 – 0.076 oz•inch)
REV	CQ-102RC	30 – 70 g•cm (0.42 – 1.02 oz•inch)
REV Back tension		2.0 – 6.0 g•cm (0.028 – 0.076 oz•inch)
FF, REW	CQ-201B	80 – 170 g•cm (1.12 – 2.38 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 90 g (more than 3.17 oz)
REV	CQ-403R	

SECTION 5
ELECTRICAL ADJUSTMENTS

TAPE SECTION **0 dB = 0.775 V**

1. The adjustments should be performed in the order given in the service manual. (As a general rule. Playback circuit adjustment should be completed before performing recording circuit adjustment.)
2. The adjustments should be performed for both L-ch and R-ch unless otherwise indicated.

Standard Output Level

	SP OUT	PHONES
Load impedance	6 Ω	32 Ω
Output level	0.775 V (0 dB)	0.25 V (–10 dB)

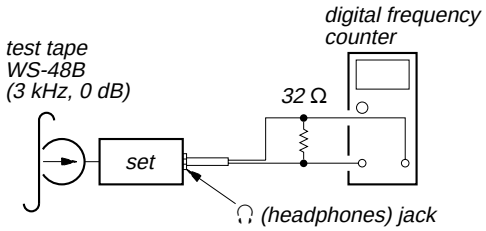
Test Tape

Type	Signal	Used for
WS-48B	3 kHz, 0 dB	Tape speed adjustment
P-4-A063	6.3 kHz, –10 dB	Head azimuth adjustment

Tape Speed Adjustment

Procedure:

Mode: playback



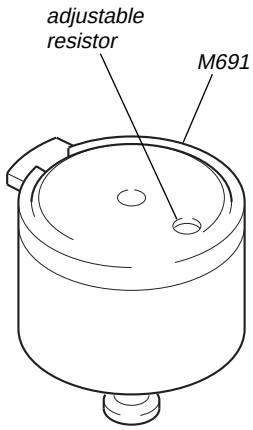
Adjust so that the value on the frequency counter is 3 kHz.

Specification Values:

Digital frequency counter
2,970 to 3,030 Hz

Adjust so that the frequency at the beginning and that at the end of tape winding are between 2,970 and 3,030 Hz.

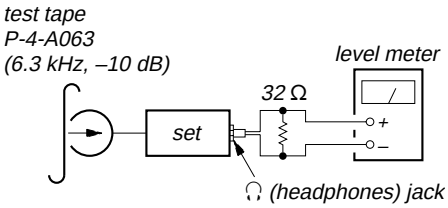
Adjustment Location:



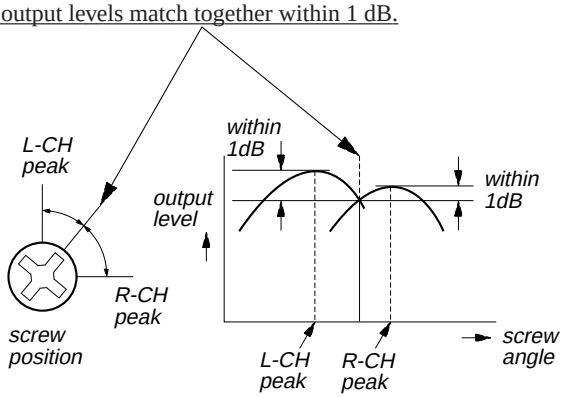
Record/Playback Head Azimuth Adjustment

Procedure:

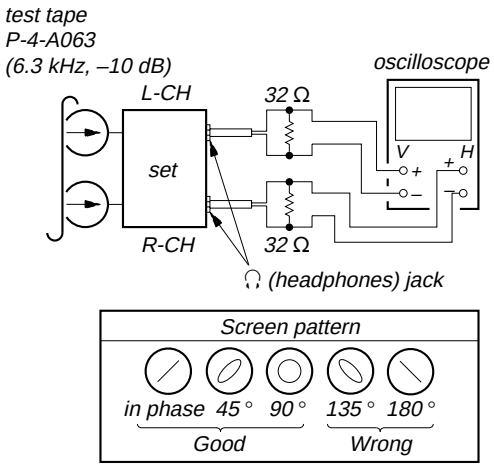
1. Mode: playback



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.

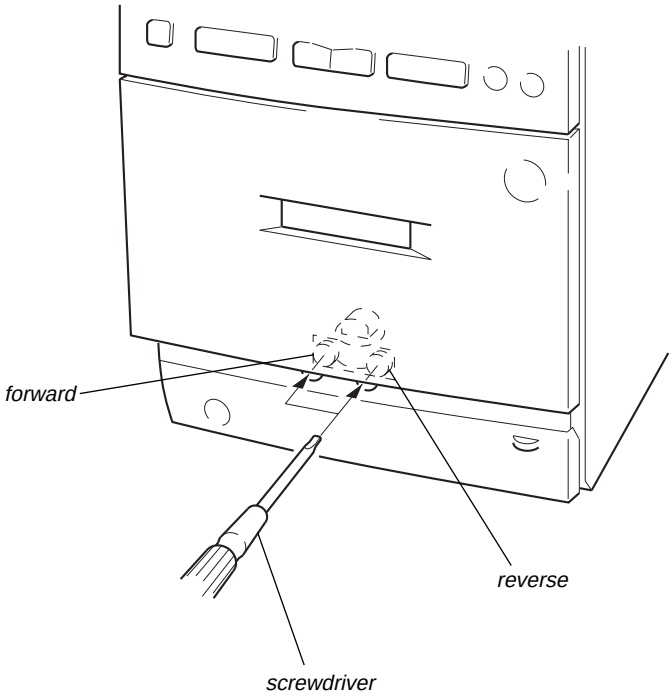


3. Phase Check
   Mode: playback



4. After the adjustment, lock the screws with locking compound.

Adjustment Location:



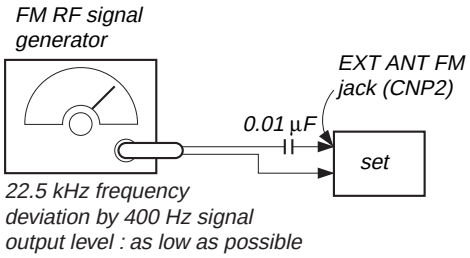
TUNER SECTION | 0 dB = 1 μV

Precautions in Repairing

Note : As a tuner unit (TU1) is difficult to repair if faulty, replace it with new one.

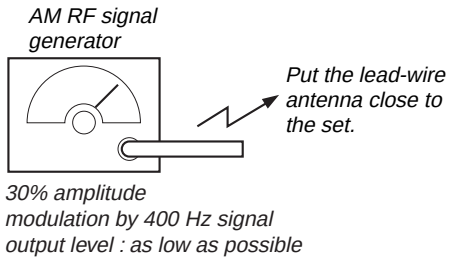
- **FM Section**

Setting:
FUNCTION button: FM

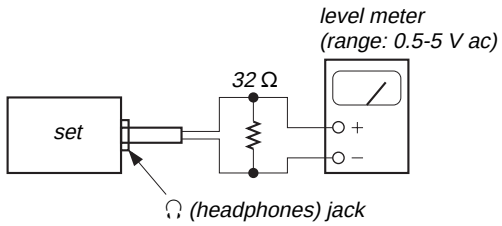

FM RF signal generator
EXT ANT FM jack (CNP2)
0.01 μF
set
22.5 kHz frequency deviation by 400 Hz signal output level : as low as possible

- **MW/LW Section**

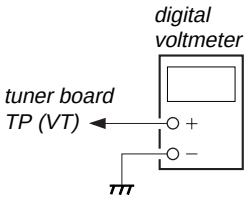
Setting:
FUNCTION button: MW or LW


AM RF signal generator
Put the lead-wire antenna close to the set.
30% amplitude modulation by 400 Hz signal output level : as low as possible

- **Connecting Level Meter (FM, MW and LW)**



- **Connecting Digital Voltmeter (FM, MW and LW)**



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	87.5 MHz	108 MHz
Reading on Digital voltmeter	1.3 V or more	9.0 V or less
Adjustment Part	<confirmation>	<confirmation>

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
<confirmation>	<confirmation>
87.5 MHz	108 MHz

MW FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	531 kHz	1,611 kHz
Reading on Digital voltmeter	0.85 ± 0.5 V	6.8 ± 1.5 V
Adjustment Part	<confirmation>	<confirmation>

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	CT4
621 kHz	1,404 kHz

AM IF ADJUSTMENT
Adjust for a maximum reading on level meter.
CFT1
450 kHz

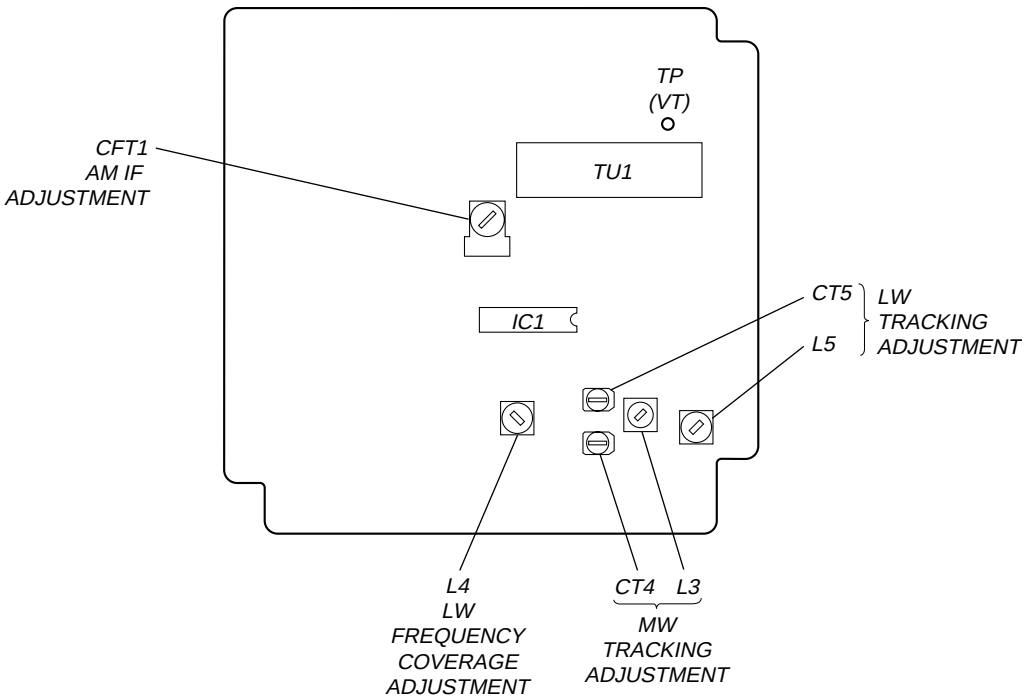
LW FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	153 kHz	279 kHz
Reading on Digital voltmeter	0.6 ± 0.4 V	7.5 ± 0.5 V
Adjustment Part	<confirmation>	L4

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L5	CT5
162 kHz	261 kHz

Adjustment Location: TUNER board (See page 15.)

Adjustment Location:

– tuner board (component side) –



CD SECTION

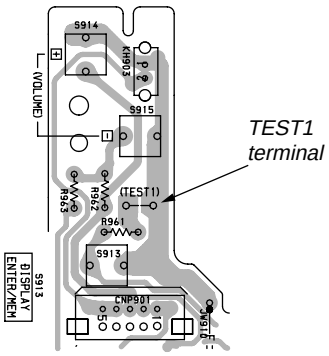
Notes on Adjustment

1. Perform adjustment in test mode.
   After adjustments, be sure to release test mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18. Part No. 3-702-101-01) only when so indicated.

How to Put the Set into Test Mode

1. Disconnect an AC plug cord. (Power is not applied to the set.)
2. Solder across the TEST1 terminal.
3. Close the lid (CD).
4. Connect an AC plug cord.

[SW1 BOARD] (Conductor Side)



How to Release the Test Mode

1. Be sure to disconnect the AC plug cord and remove the solder bridge at the TEST1 terminal connected before in setting.
2. The set thus becomes available for normal operation

Before Beginning Adjustment

Put the set into test mode and perform the following checks. Repair if there are any problems.

• Sled Motor Check

Press the ▶▶I, I◀◀ buttons and confirm that the optical pick-up moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.

▶▶I : Optical pick-up moves to the outer circumference
I◀◀ : Optical pick-up moves to the inner circumference

• Focus Search Check

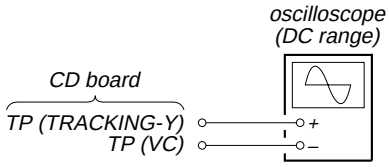
1. Press the ► button. (Focus search operation is performed continuously.)
2. Look at the optical pick-up objective lens and confirm that it moves up and down smoothly, when no catching or abnormal noises.
3. Press the ■ button.
   Confirm that focus search operation stops. If it does not , press the ■ button again longer.

Note: When the malfunction is occurred by mis-passing other keys, turn off the power and check again from making the test mode.

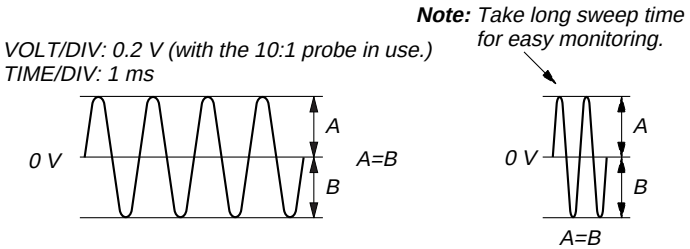
E-F Balance Adjustment

This adjustment is to be done when the optical pick-up is replaced.

Procedure:



1. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid (CD).
3. Put the set into test mode.
4. Press the ▶▶I and I◀◀ buttons to move the optical pick-up to the center.
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Adjust RV703 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.



Adjustment value: 0.4 ± 0.2 Vp-p (A + B)

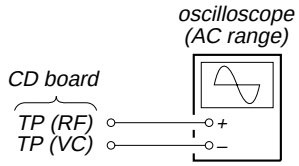
7. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 19.)

Focus Bias Adjustment

This adjustment is to be done when the optical pick-up is replaced.

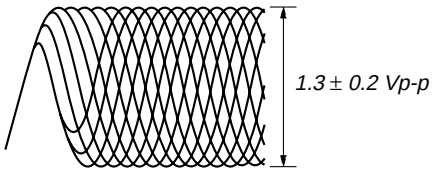
Procedure:



1. Connect the oscilloscope TP (RF) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid for CD.
3. Put the set into test mode. (See page 16.)
4. Press ▶▶I and I◀◀ buttons to move the optical pick-up to the center. (Move the optical pick-up to the music area on the disc to enable easy visibility of the eye pattern.)
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Press the ► button.
   [Both tracking and sled are turned ON.]
7. Adjust RV701 so that the oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (≈) in the center of the waveform can be clearly distinguished.

• RF signal reference waveform (eye pattern)

VOLT/DIV : 0.2 V (With the 10:1 probe in use)
TIME/DIV : 500 ns



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 19.)

REFERENCE

Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.
However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.
Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.
However, as these reciprocate, the adjustment is at the point where both are satisfied.

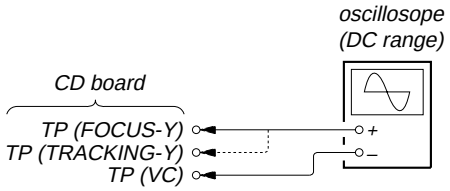
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for ■→► on automatic selection. (I◀◀, ▶▶I buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for ■→► or automatic selection. (I◀◀, ▶▶I buttons pressed.)	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

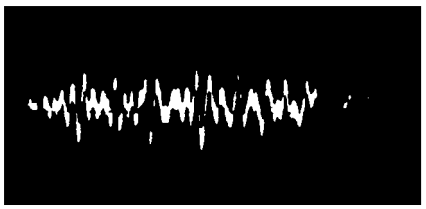
– Simple Adjustment –

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the primary adjustment are only a little different, return the controls to the original position.



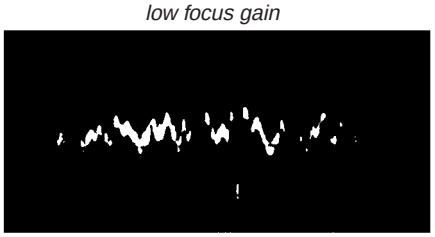
Procedure:

1. Keep the set horizontal.
   If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.
2. Connect the oscilloscope TP (FOCUS-Y) and TP (VC) on the CD board.
3. Insert the disc (YEDS-18) in and close the lid for CD.
4. Put the set into test mode. (See page 16.)
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Press the ► button.
   [Both tracking and sled are turned ON.]
7. Adjust RV702 so that the waveform is as shown in the figure below. (Focus gain adjustment)

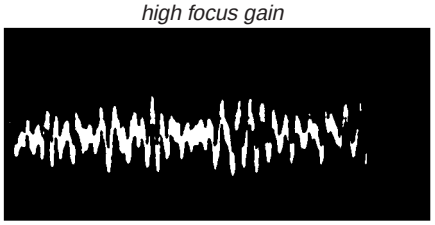


• Inconnect Examples (DC level changes more than on adjusted waveform)

low focus gain



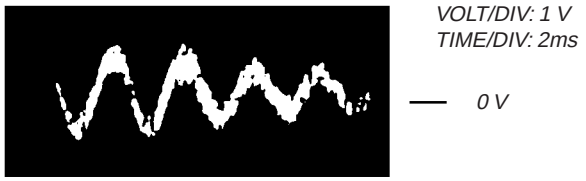
high focus gain



8. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
9. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)

• Incorrect Examples (fundamental wave appears)

low tracking gain



high tracking gain
(high fundamental wave than for low gain)

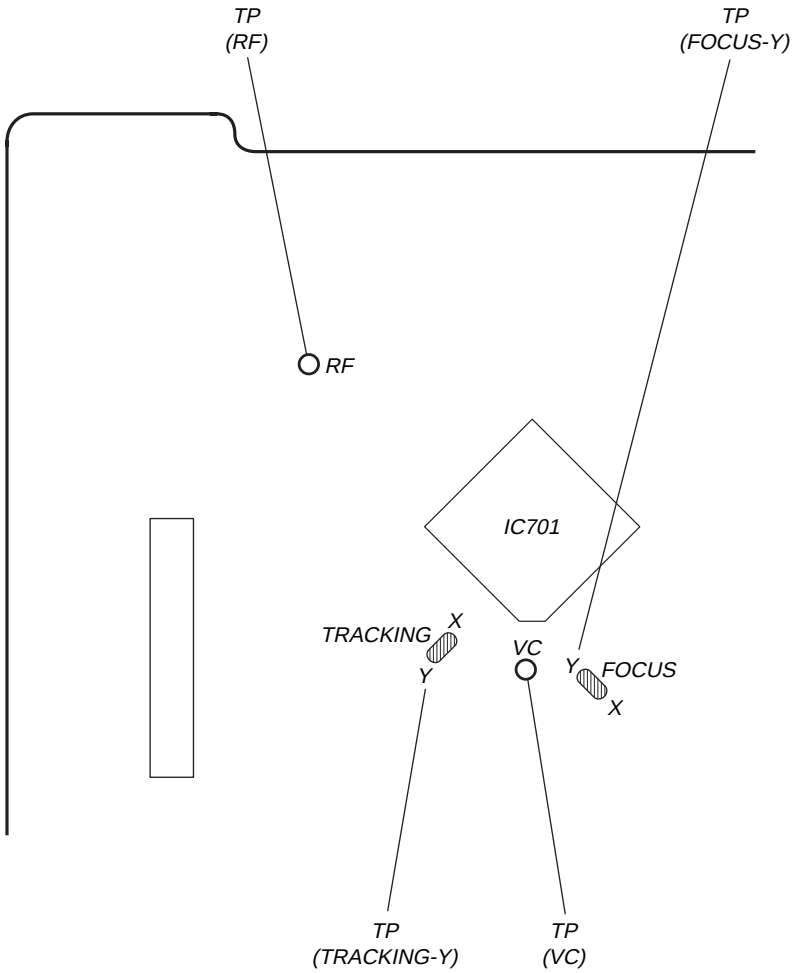
Note:
VOLT/DIV: with the 10:1 probe in used.

10. Release test mode after adjustment is completed.

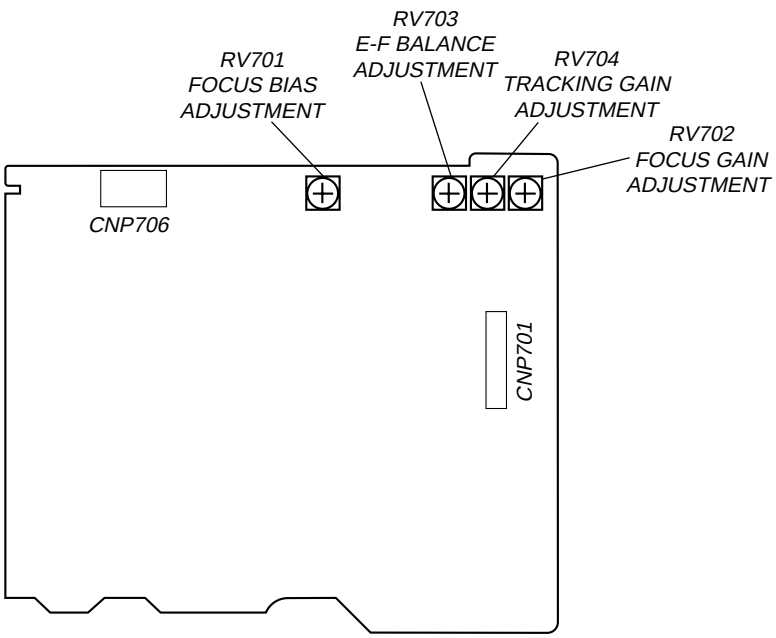
Adjustment Location: CD board (See page 19.)

Connection and Adjustment Location:

–CD board (conductor side)–



–CD board (component side)–



SECTION 6
DIAGRAMS

6-1. IC PIN DESCRIPTION

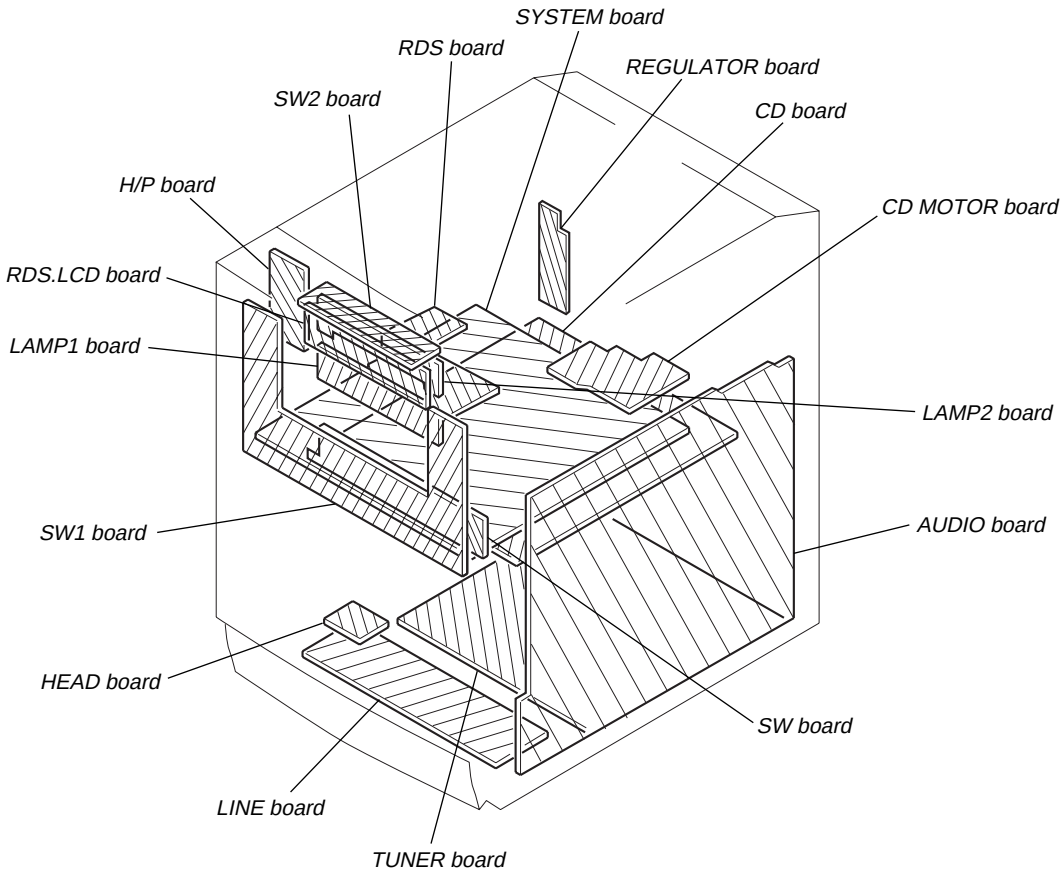
• IC801 CXP83120A-022Q (SYSTEM CONTROL, LCD DRIVE)

Pin No.	Pin Name	I/O	Pin Description
1	AC CHK	I	AC check input
2	C-SCOR	I	CD-SCOR input
3	RMC	I	Remote commander input
4	C-XRST	O	CD system reset output
5	C-XLAT	O	CD DSP (IC702) command latch output
6	C-DAT	O	CD DSP (IC702) command data output
7	C-CLK	O	Clock output for CD DSP (IC702) command
8	C-DOOR	I	Open/close detection input (“L”: close, “H”: open)
9	328/332	I	328/332 select input (Fixed at “H”.)
10	C-SENS	I	CD-SENS input
11	C-SQCK	O	Clock output for CD SUB-Q.
12	C-SQSO	I	CD SUB-Q input
13	T-BIAS	I	Tape REC BIAS input
14	—	—	Not used. (Open)
15	T-REC	I	Tape REC input
16	T-SOL	O	Plunger control output
17	T-MODE	O	HEAD switching output
18	T-AMS	I	AMS sensitivity switching
19	T-MCON	O	Motor control output (“H”: Motor ON)
20	P-CON	O	Power on/off control output
21	V-CLK	O	Volume clock output
22	V-DAT	O	Volume data output
23	V-CE	O	Electrical volume (IC302) chip enable output
24	R-ST	I	Stereo detection input
25	R-COUNT	I	Tuner PLL IC count input
26	R-DAT	O	Tuner PLL IC data output
27	R-CLK	O	Tuner PLL IC clock output
28	R-CE	O	Tuner PLL IC chip enable output
29	9K/10K	I	9K/10K select input (Fixed at “H”.)
30	T-STAT	I	Tape detection input
31 – 34	KEY-0 – 3	I	Key return signal input
35	INIT	O	Initial setting output (Not used.)
36	SIMUKE	I	Destination setting terminal (Fixed at “H”.)
37	SFC	O	Shift clock ON/OFF out
38	RST	I	Reset input
39	EXTAL1	I	Clock oscillation input (4.19 MHz)
40	XTAL1	O	Clock oscillation output (4.19 MHz)
41	VSS	—	Ground (for A/D converter)
42	XTAL2	O	Clock oscillation output (Not used.)
43	EXTAL2	I	Clock oscillation output (Fixed at “L”.)
44	AVREF	I	Reference voltage input (for A/D converter)
45	AVSS	—	Ground (for A/D converter)
46	VL	O	LCD bias resistor current control terminal (Cut off at standby)
47 – 49	VLC3 – 1	—	LCD bias power supply terminal
50 – 53	COM0 – 3	O	LCD common signal output terminal
54 – 77	SEG0 – 23	O	LCD segment signal output terminal
78 – 84	NC	—	Not used. (Open)
85 – 87	—	—	Not used. (Open)
88	BL-CONT	O	LCD Back light control output
89	VDD	—	Power supply (+5 V)

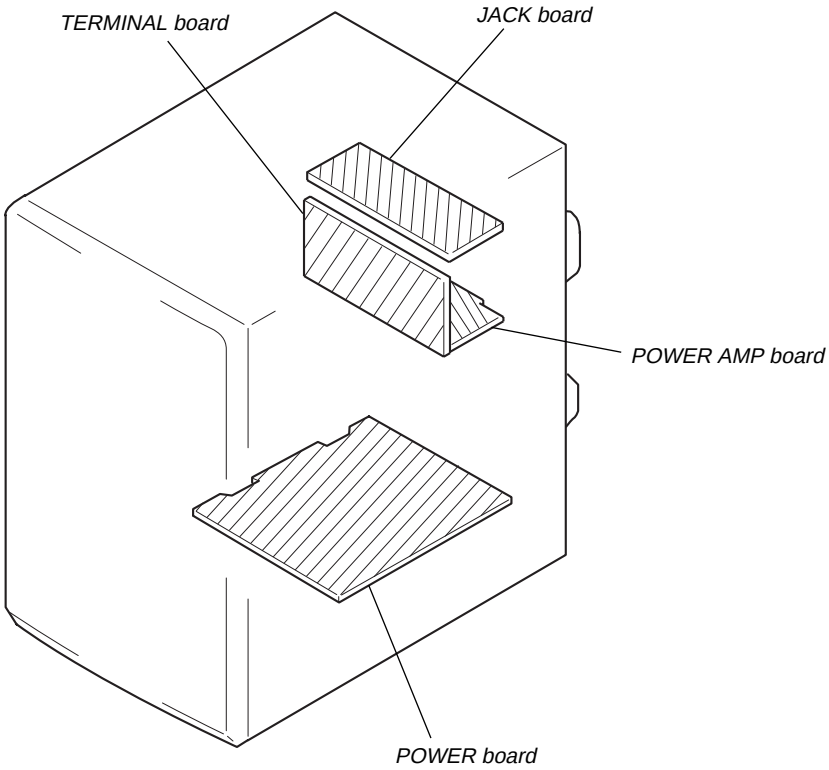
Pin No.	Pin Name	I/O	Pin Description
90	NC	—	Connected to the power supply.
91	VSS	—	Ground
92	TX	O	Crystal connection for clock oscillation. (32.768 kHz)
93	TEX	I	Crystal connection for clock oscillation. (32.768 kHz)
94	C-MUTE	O	Mute output for CD.
95	B-MUTE	O	Mute output for Tuner.
96	A-MUTE	O	Mute output for Audio.
97	ISS1	I	ISS1 switch input
98	ISS2	I	ISS2 switch input
99	T-END	I	Tape end detection input
100	NC	—	Not used. (Open)

6-2. CIRCUIT BOARDS LOCATION

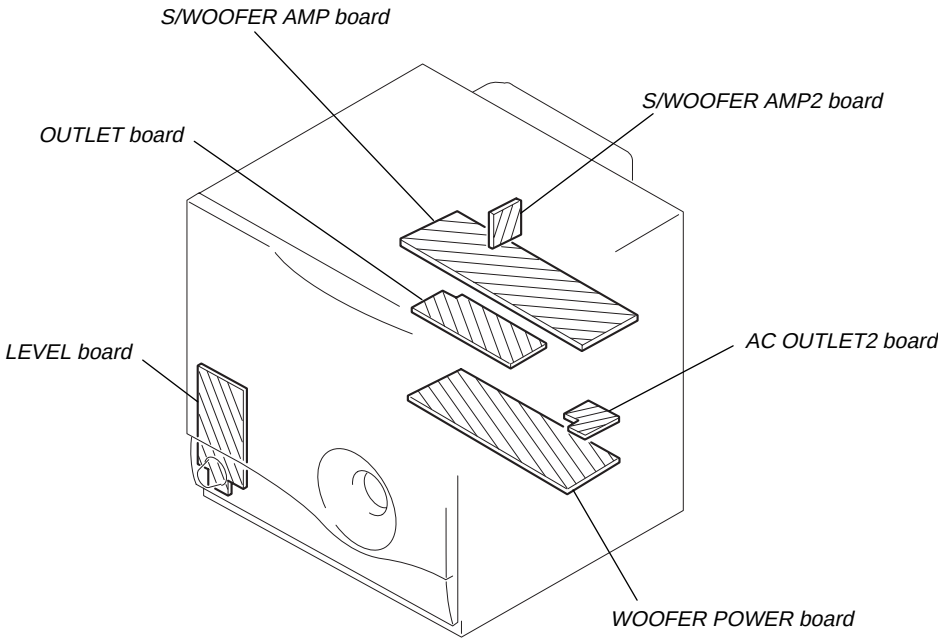
– Main Section –



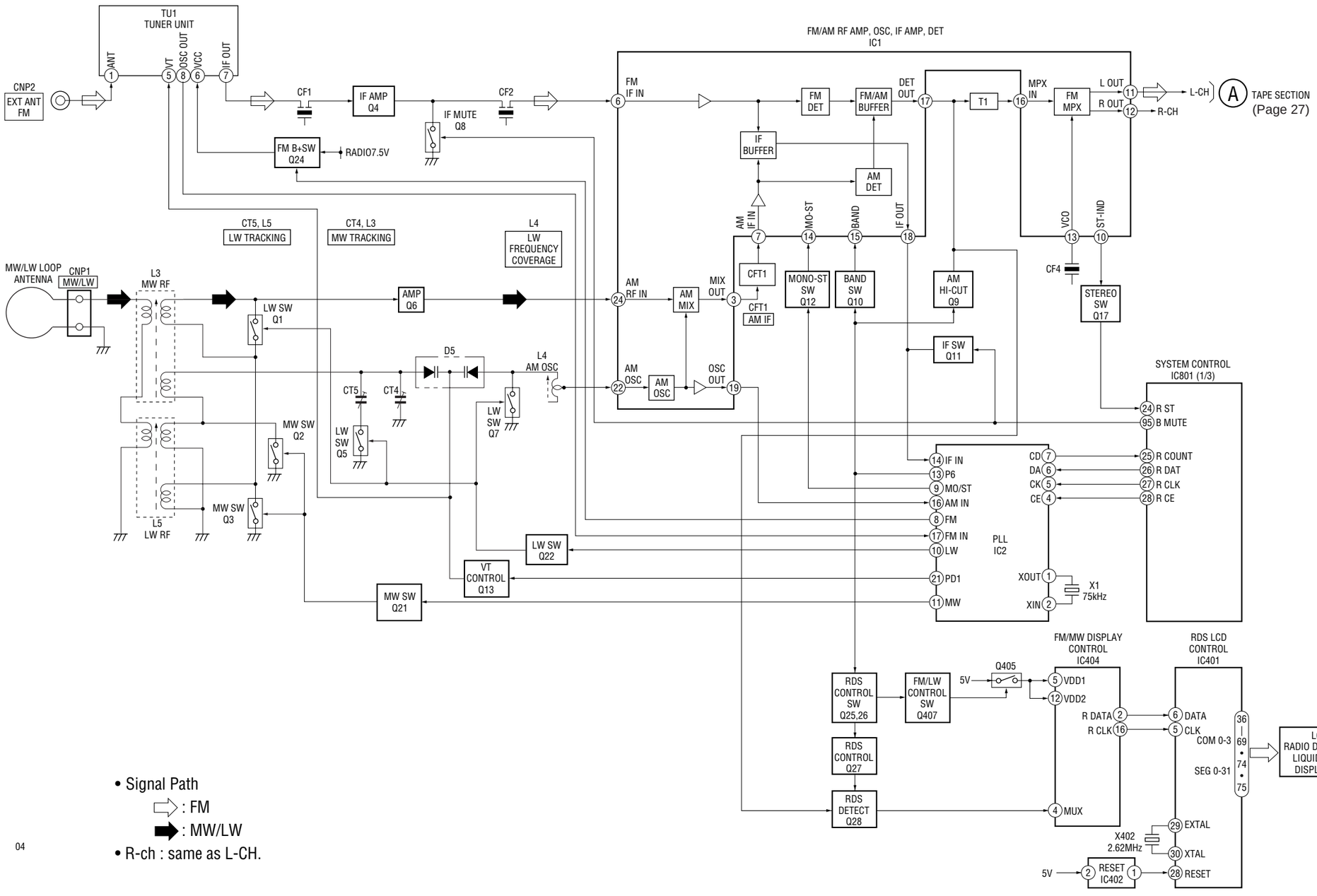
– Speaker (L) Section –



– Woofer Speaker Section –



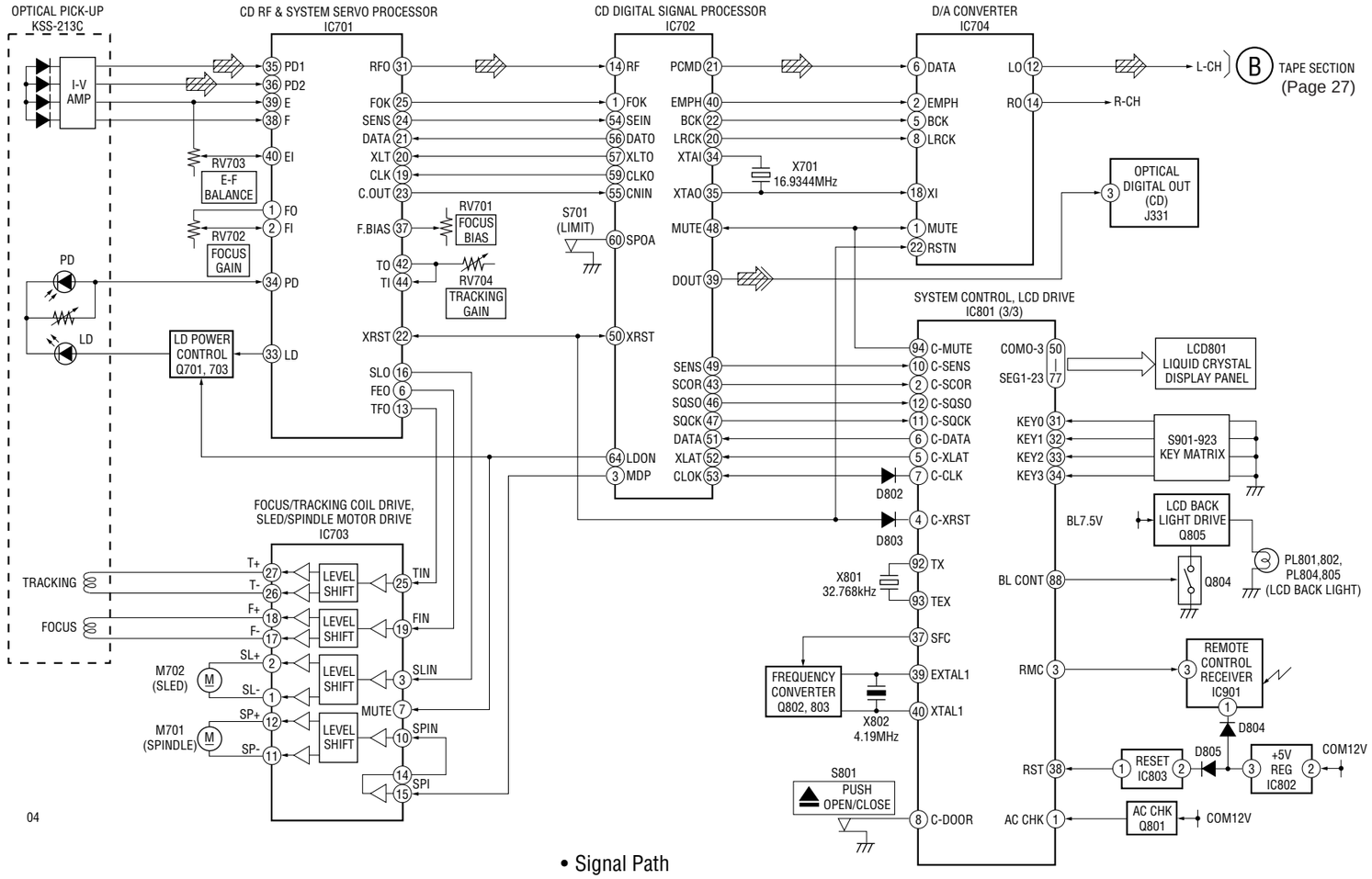
6-3. BLOCK DIAGRAM — TUNER SECTION —



• Signal Path
: FM
: MW/LW
• R-ch : same as L-CH.

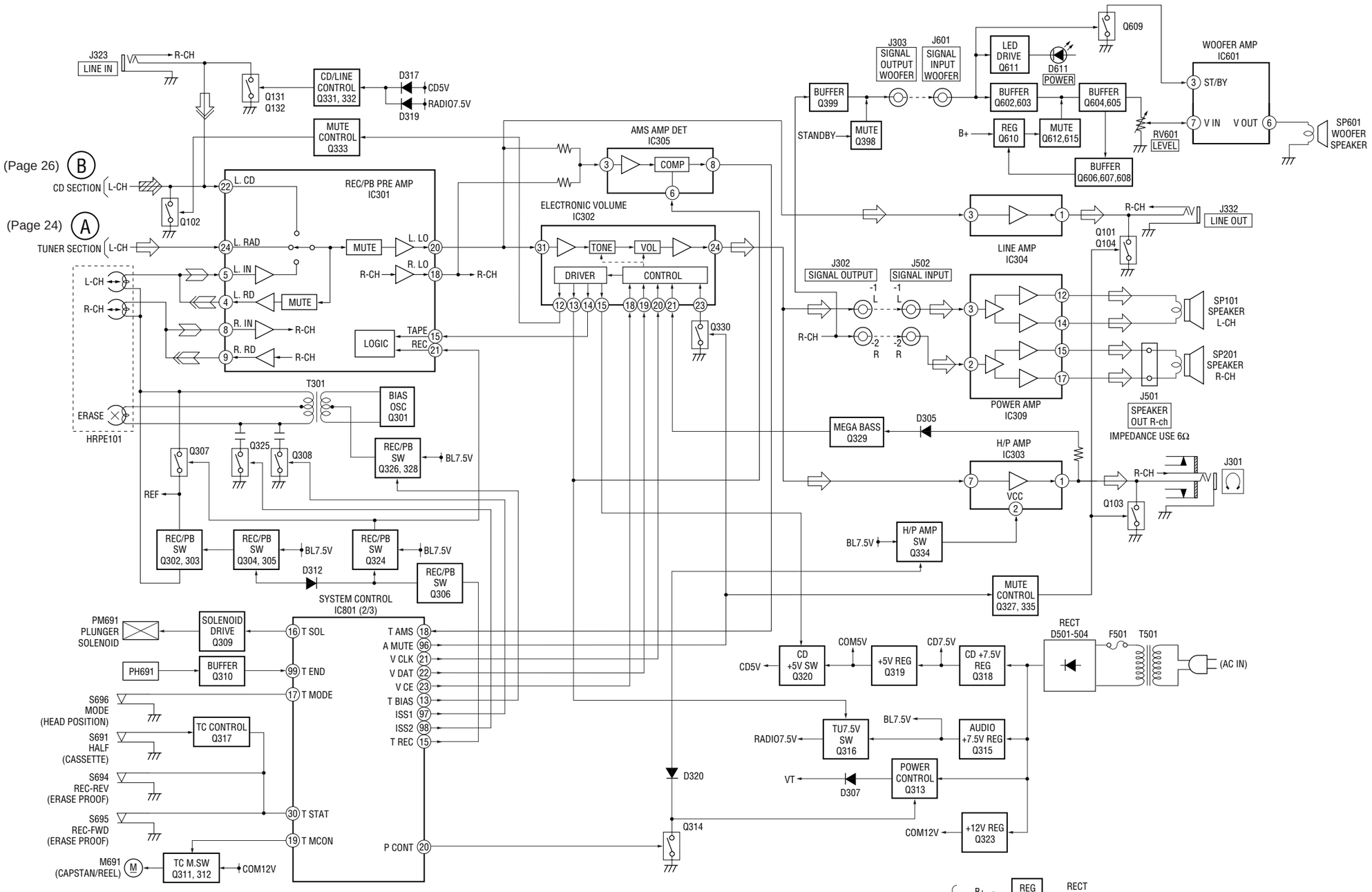
04

6-4. BLOCK DIAGRAM — CD SECTION —



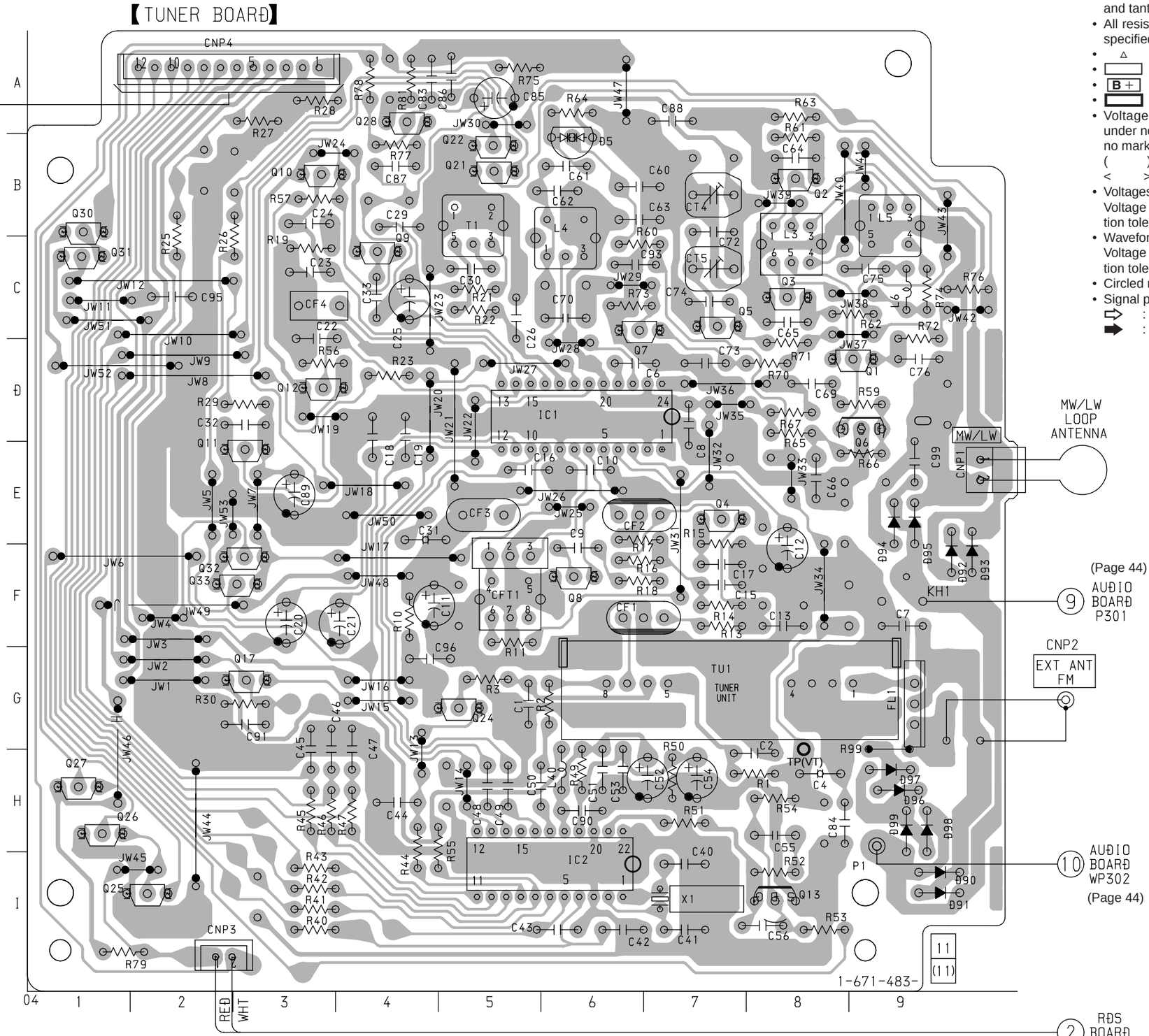
- Signal Path
  - : CD
  - : digital out
- R-ch : same as L-CH.

6-5. BLOCK DIAGRAM — TAPE SECTION —



- Signal Path
  - ⇨ : FM
  - ⇨ : TAPE (PB)
  - ⇨ : TAPE (REC)
  - ⇨ : LINE IN
  - ⇨ : CD
- R-ch : same as L-CH.

6-6. PRINTED WIRING BOARD — TUNER SECTION — • Refer to page 21 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D5	B-6
D90	I-9
D91	I-9
D92	F-9
D93	F-9
D94	E-9
D95	E-9
D96	H-9
D97	H-9
D98	H-9
D99	H-9
IC1	E-6
IC2	H-6
Q1	D-8
Q2	B-8
Q3	C-8
Q4	E-7
Q5	C-7
Q6	D-9
Q7	C-6
Q8	F-6
Q9	C-4
Q10	B-3
Q11	E-3
Q12	D-3
Q13	I-8
Q17	G-3
Q21	B-5
Q22	B-5
Q24	G-5
Q25	I-2
Q26	H-1
Q27	H-1
Q28	A-4
Q30	B-1
Q31	C-1
Q32	F-3
Q33	F-2

Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW
  < > : LW
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW/LW

Note on Printed Wiring Boards:
- ○—— : parts extracted from the component side.
- ⊡← : indicates side identified with part number.
- △ : internal component.
- ▒ : Pattern from the side which enables seeing.

6-7. SCHEMATIC DIAGRAM — TUNER SECTION — • Refer to page 63 for IC Block Diagrams.

【TUNER BOARD】

MW/LW LOOP ANTENNA

CNP1 2P

CNP2 EXT ANT FM

CNP3 FM (H) AM (L) BET

CNP4 12P

IC1 FM/AM RF AMP, OSC, IF AMP, DET

IC1 TA2008AN

IC2 BU2615S PLL

TU1 (TUNER UNIT)

Q4 2SC2410S-T IF AMP

Q5 2SC2786-TP-L LW-SW

Q6 2SK133TP-E AMP

Q7 2SC2410S-TPN LW-SW

Q8 BA1A4Z-TP IF MUTE

Q9 BA1A4P-TP AM-HICUT

Q10 BA1A4P-TP BAND-SW

Q11 BA1A4P-TP IF-SW

Q12 BA1A4P-TP MONO-SW

Q13 2SK679A-T VT CONTROL

Q17 DTA114TSA-TP STEREO SW

Q21 BN1A4M-TP MW-SW

Q22 BN1A4M-TP LW-SW

Q24 BN1A4M-TP FM B+ SW

Q25, 26 RDS CONTROL SW

Q25 DTC114TS

Q26 DTC114ES

Q27 RDS CONTROL

Q27 DTA143ZS

Q28 2SC2458TP-GR

Q28 DETECTER

Q30, 31 BAND MUTE SW

Q30 BA1A4P

Q31 BN1A4M

Q32 BA1A4P L CH MUTE

Q33 BA1A4P R CH MUTE

D5 KV1560NT

L3 MW ANT

L4 AM OSC

L5 LW ANT

L40 220uH

CF1 CF2 CF3 CF4

CFT1

FL1 BPF

CNP4 12P	
1	R CH
2	GND
3	L CH
4	PLL 5V
5	RADIO 7.5V
6	VT (10V)
7	STEREO
8	COUNT DATA
9	RADIO DATA
10	RADIO CLOCK
11	CE
12	BAND MUTE

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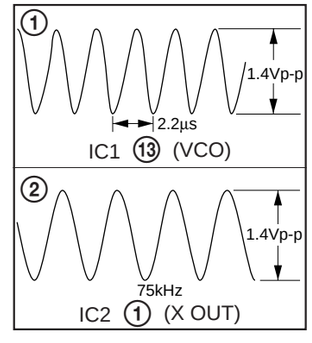
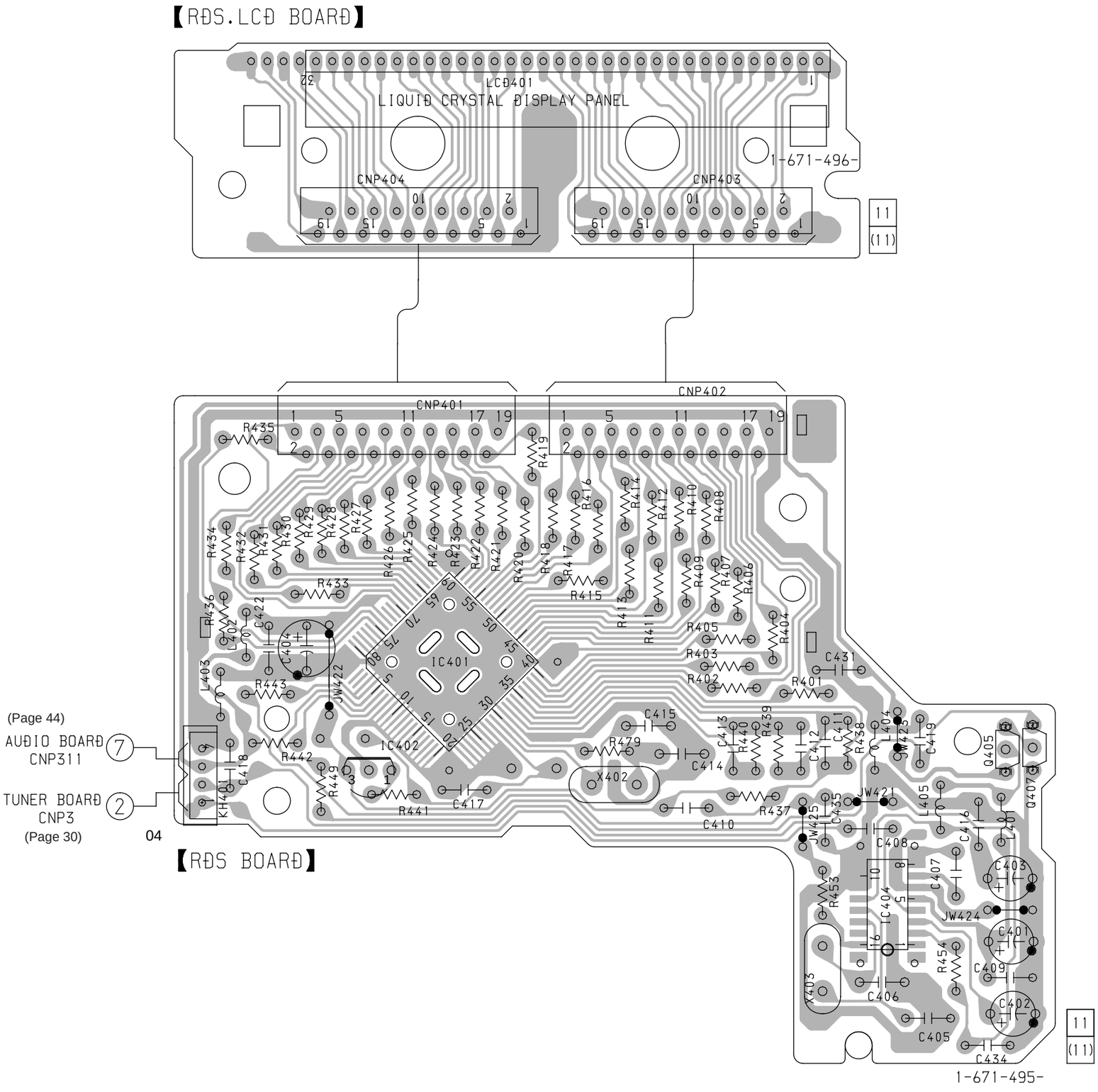
• **Waveforms**

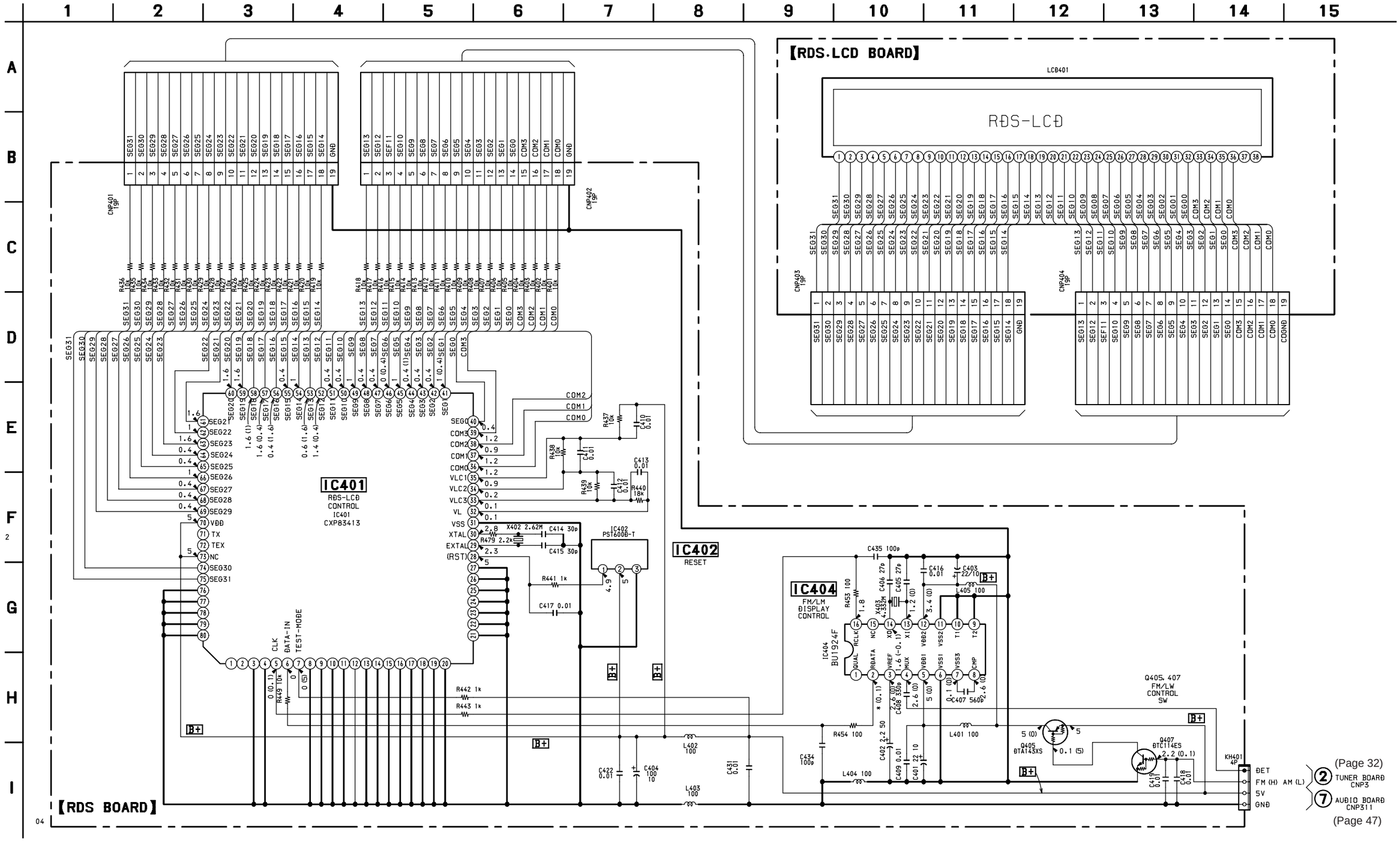


6-8. PRINTED WIRING BOARDS — RDS SECTION — • Refer to page 21 for Circuit Boards Location.



Note:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

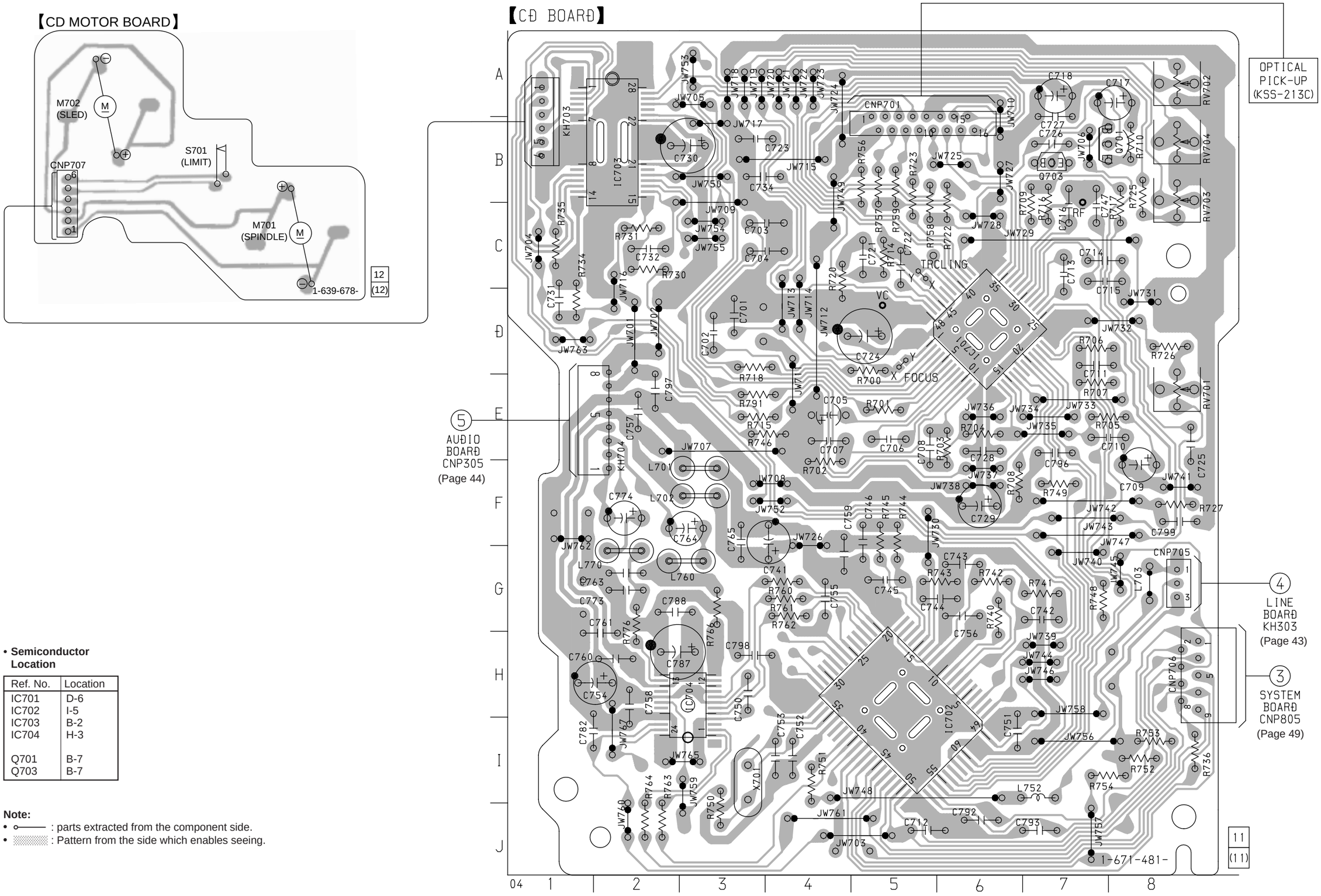
6-9. SCHEMATIC DIAGRAM — RDS SECTION — • Refer to page 64 for IC Block Diagrams.



Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line.
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : MW
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

6-10. PRINTED WIRING BOARDS — CD SECTION — • Refer to page 21 for Circuit Boards Location.

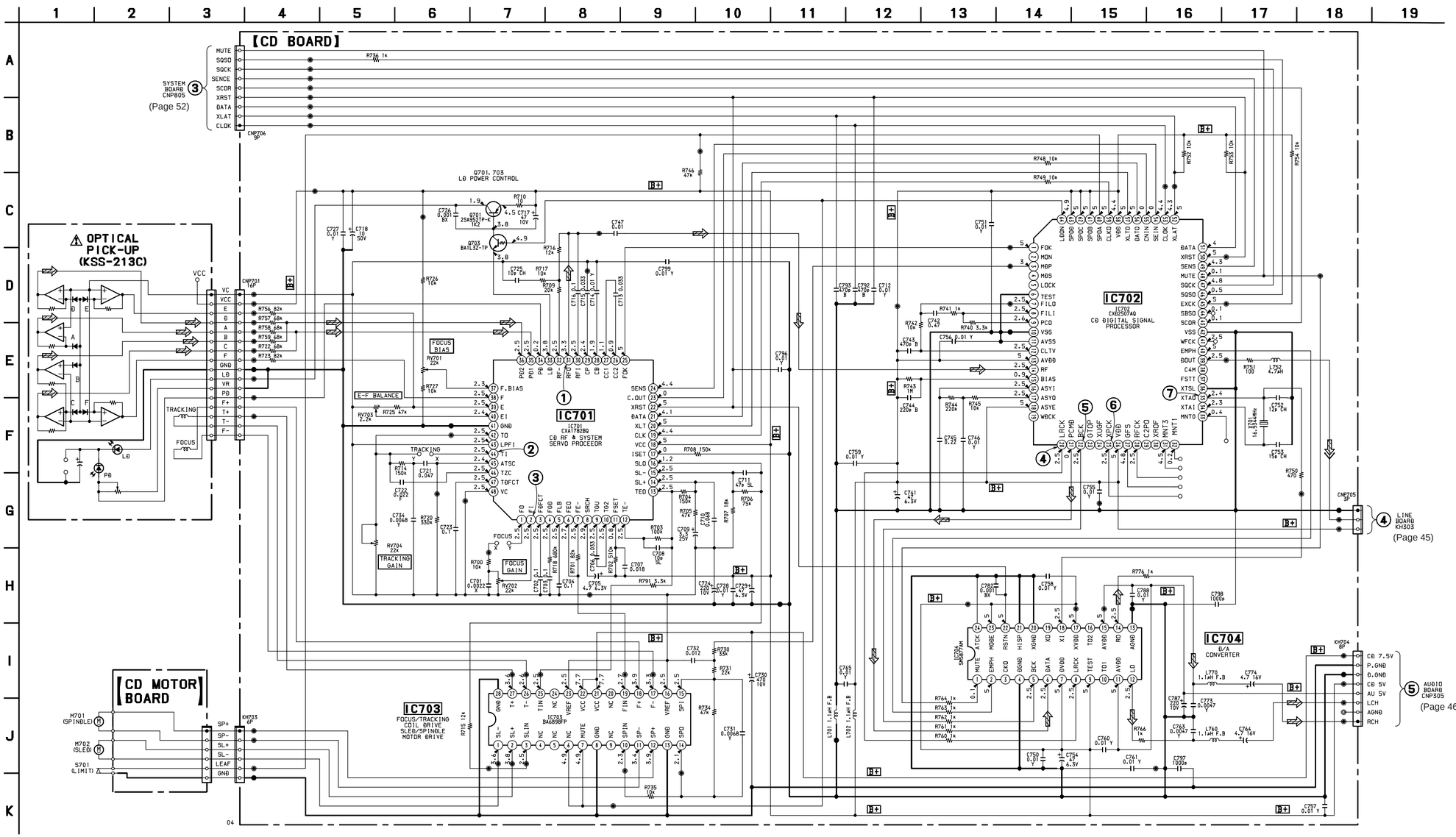


• **Semiconductor Location**

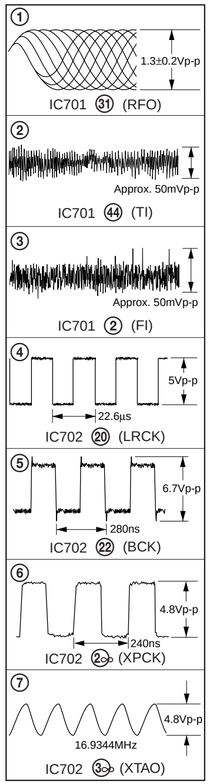
Ref. No.	Location
IC701	D-6
IC702	I-5
IC703	B-2
IC704	H-3
Q701	B-7
Q703	B-7

Note:
• ⟜——: parts extracted from the component side.
• ▒▒▒: Pattern from the side which enables seeing.

6-11. SCHEMATIC DIAGRAM — CD SECTION — • Refer to page 65 for IC Block Diagrams.



• **Waveforms**



Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : CD STOP
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : CD
  : digital out

6-12. PRINTED WIRING BOARDS — MAIN SECTION —

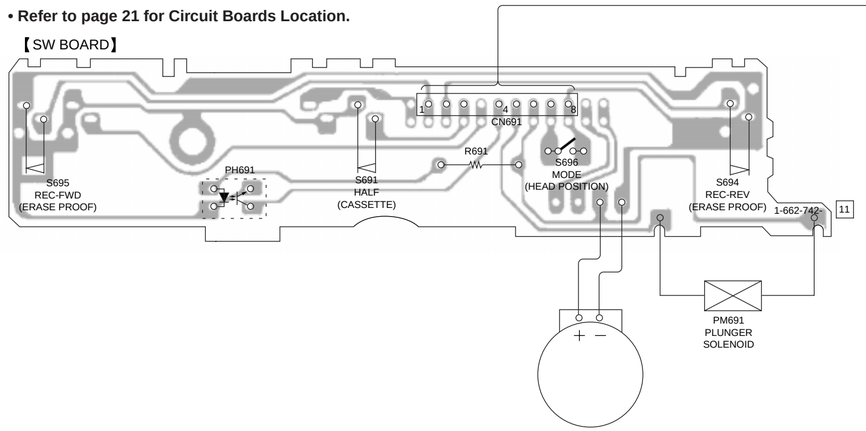
• Refer to page 21 for Circuit Boards Location.

• **Semiconductor Location**

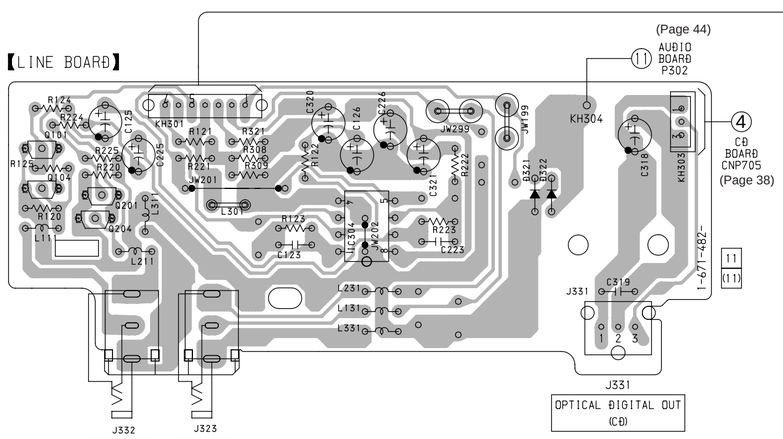
Ref. No.	Location
D301	H-7
D302	B-7
D304	C-5
D305	E-9
D307	A-7
D308	B-11
D309	C-10
D310	C-9
D311	B-9
D312	F-7
D313	B-9
D314	I-9
D315	B-8
D316	B-7
D317	D-5
D318	F-9
D319	D-8
D320	C-11
IC301	H-6
IC302	H-11
IC303	E-10
IC305	I-1
Q102	G-4
Q103	D-11
Q131	G-3
Q132	H-3
Q202	G-3
Q203	D-11
Q231	F-3
Q232	F-3
Q301	E-6
Q302	F-4
Q303	F-5
Q304	F-8
Q305	F-7
Q306	F-7
Q307	F-4
Q308	E-3
Q309	C-4
Q310	C-3
Q311	C-7
Q312	B-7
Q313	C-10
Q314	C-11
Q316	D-8
Q317	B-6
Q319	C-8
Q320	E-7
Q323	C-8
Q324	F-9
Q325	E-4
Q326	F-8
Q327	D-2
Q328	E-8
Q329	I-9
Q330	J-12
Q331	C-2
Q332	C-3
Q333	D-5
Q334	E-10
Q335	E-2
Q398	C-12
Q399	C-12

Note:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.

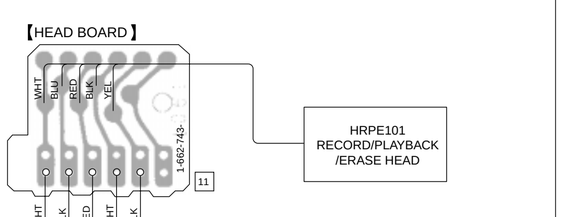
【SW BOARD】



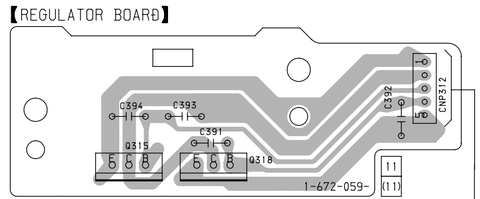
【LINE BOARD】



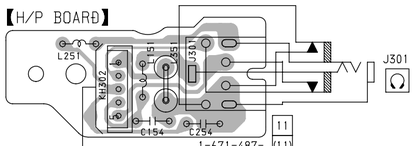
【HEAD BOARD】



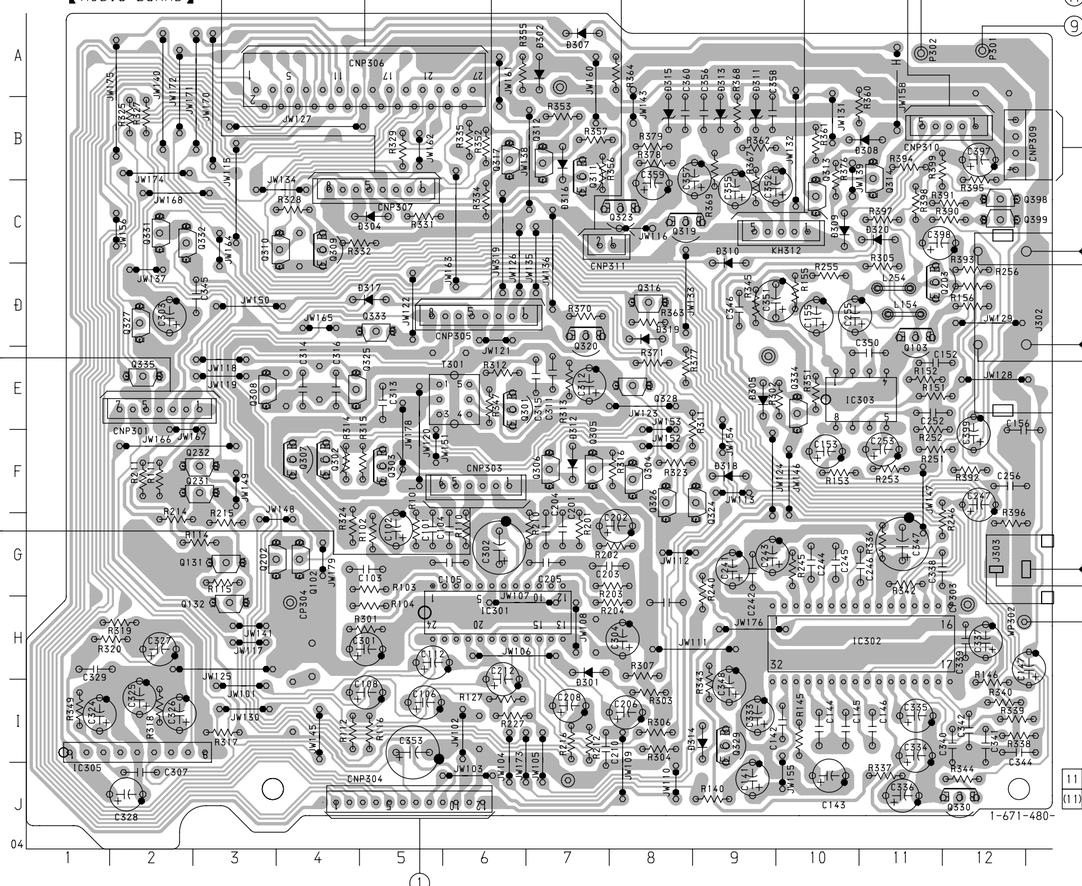
【REGULATOR BOARD】



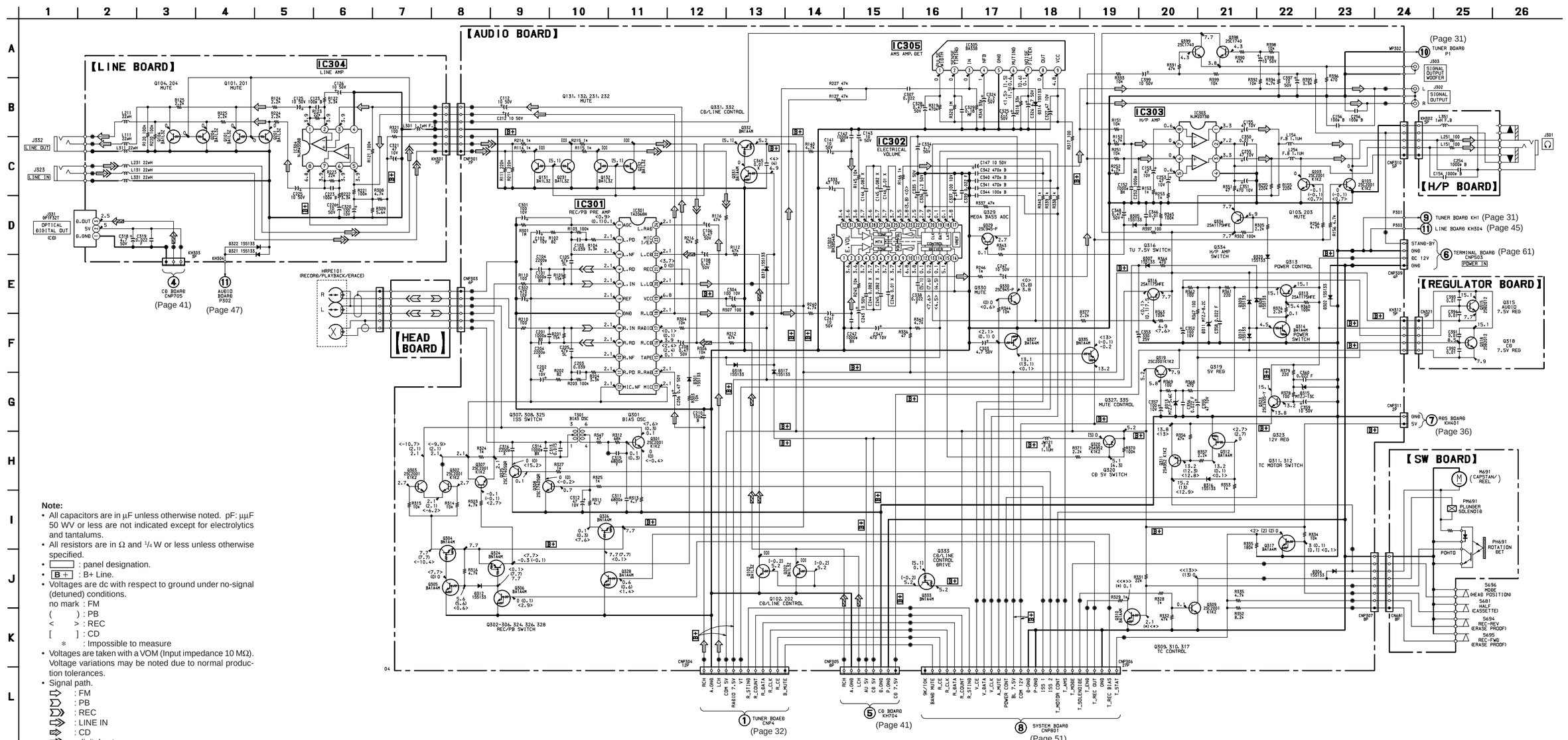
【H/P BOARD】



【AUDIO BOARD】



6-13. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 64 for IC Block Diagrams.



Note:

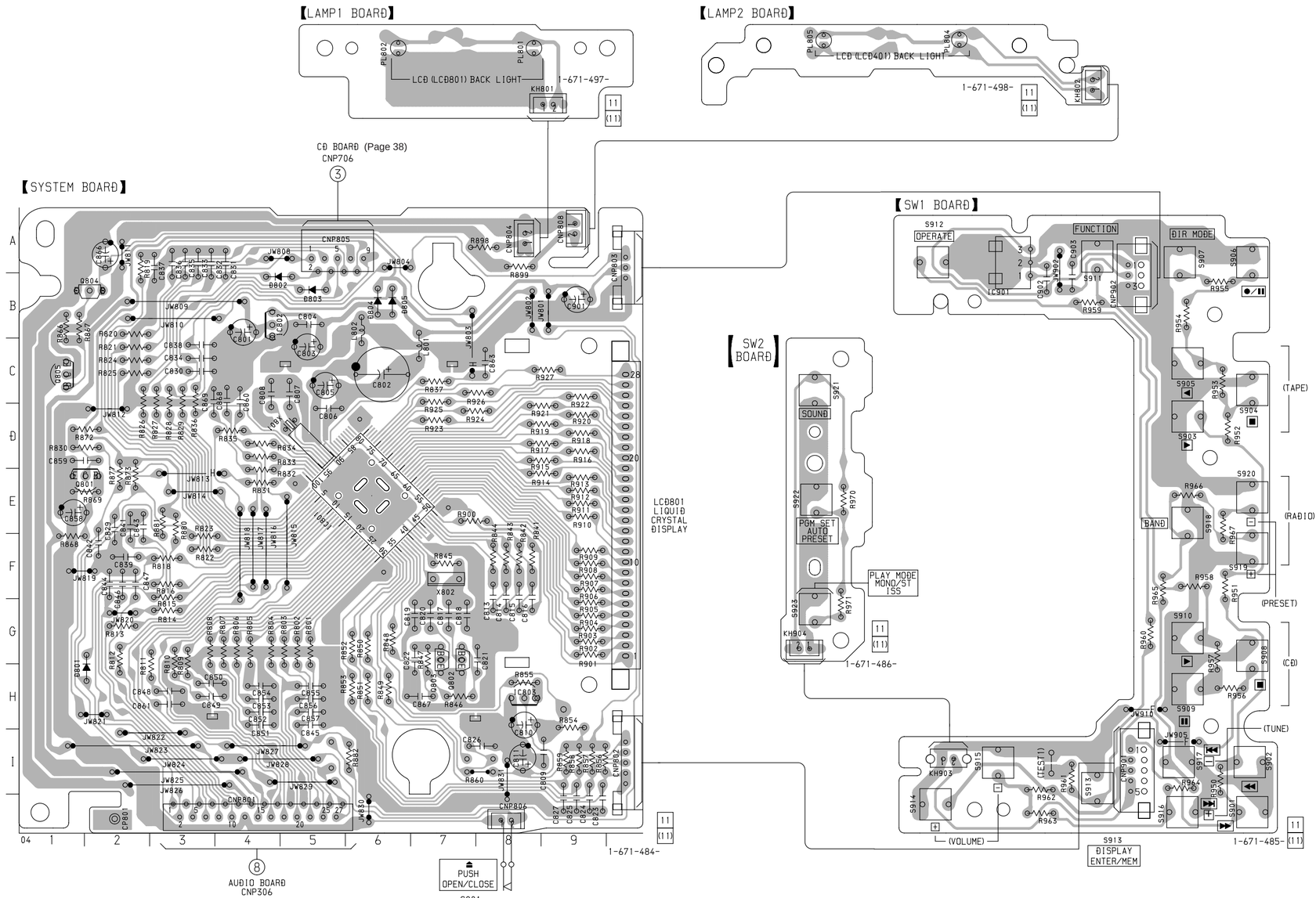
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PB
  < > : REC
  [ ] : CD
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇨ : PB
  ⇨ : REC
  ⇨ : LINE IN
  ⇨ : CD
  ⇨ : digital out

6-14. PRINTED WIRING BOARDS — CONTROL SECTION — • Refer to page 21 for Circuit Boards Location.

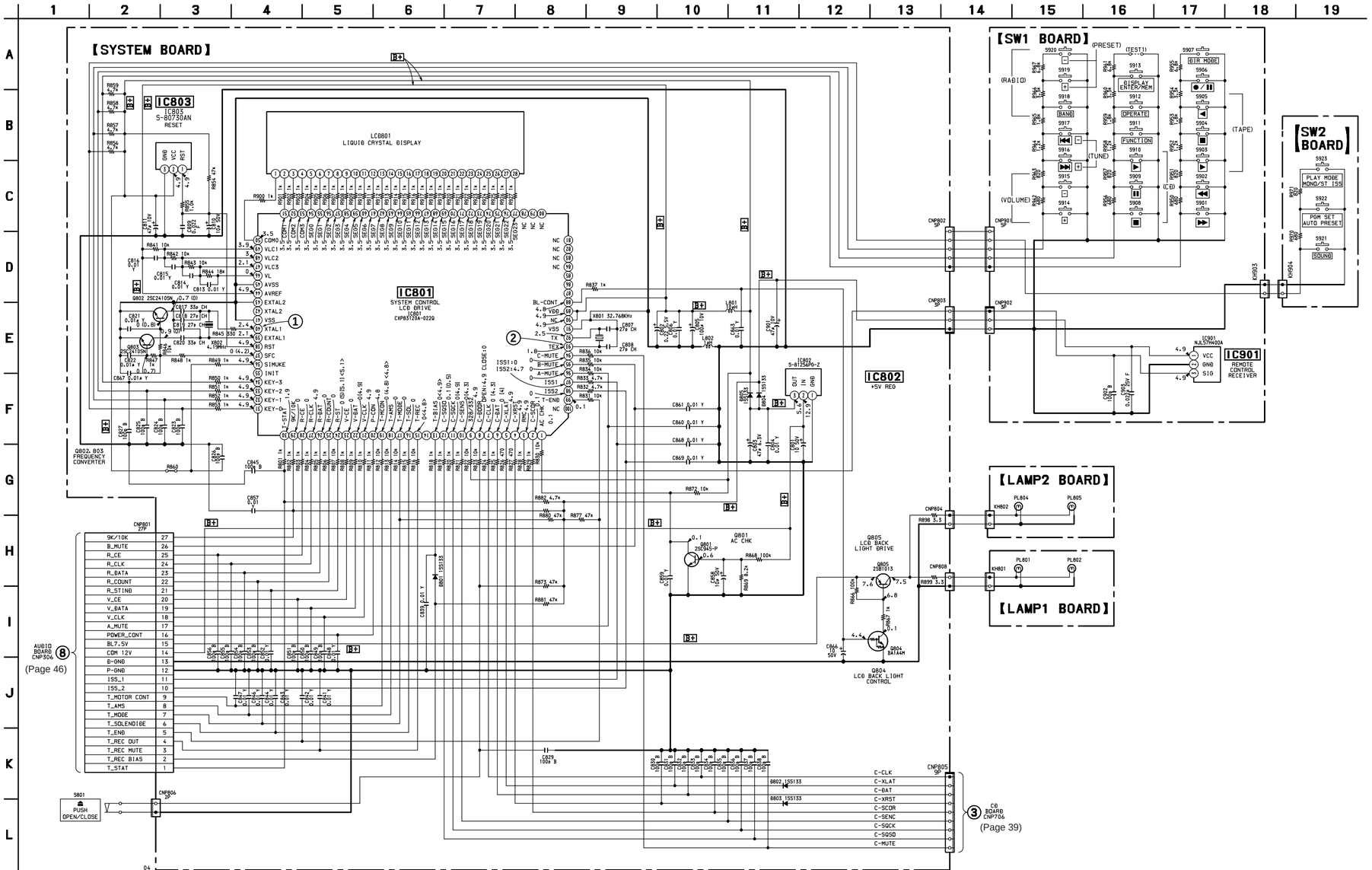
• **Semiconductor Location**

Ref. No.	Location
D801	H-2
D802	B-4
D803	B-5
D804	B-6
D805	B-6
IC801	E-5
IC802	B-4
IC803	H-8
Q801	E-2
Q802	G-7
Q803	G-7
Q804	B-2
Q805	C-1

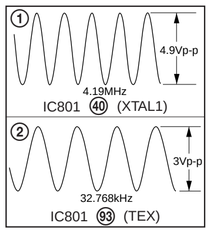
Note:
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.



6-15. SCHEMATIC DIAGRAM — CONTROL SECTION —



• **Waveforms**



Note:

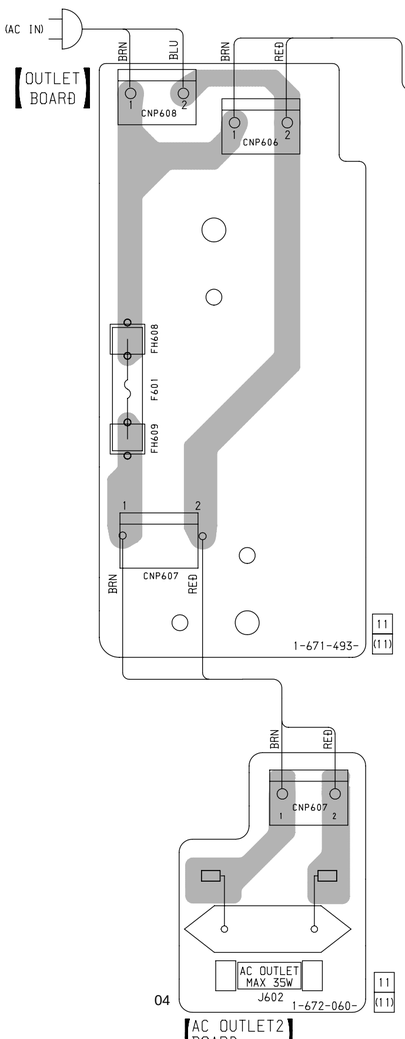
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- [ ] : panel designation.
- [B+] : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PB
  < > : REC
  [ ] : CD
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

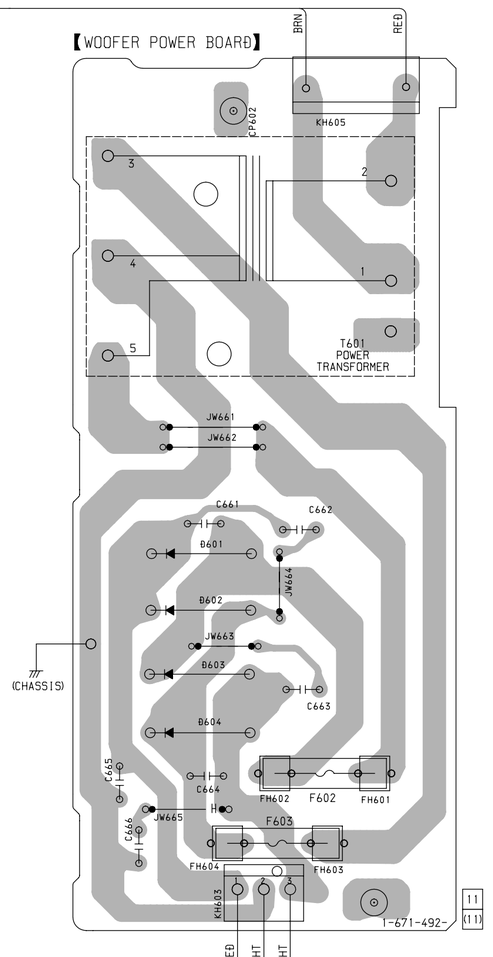
6-16. PRINTED WIRING BOARDS — WOOFER SPEAKER SECTION — • Refer to page 22 for Circuit Boards Location.

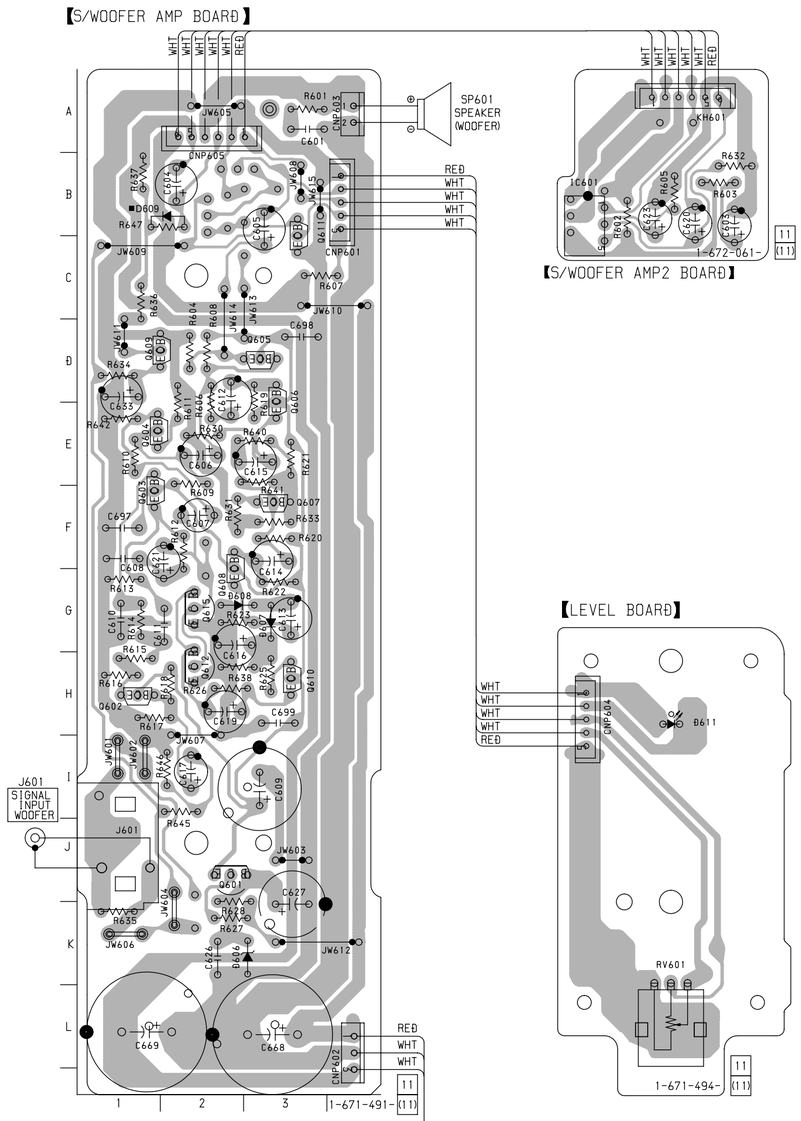
• **Semiconductor Location**

Ref. No.	Location
D606	K-3
D607	G-3
D608	G-3
D609	B-1
Q601	J-2
Q602	H-1
Q603	F-1
Q604	E-2
Q605	D-3
Q606	E-3
Q607	F-3
Q608	G-2
Q609	D-2
Q610	H-3
Q611	C-3
Q612	H-2
Q615	G-2

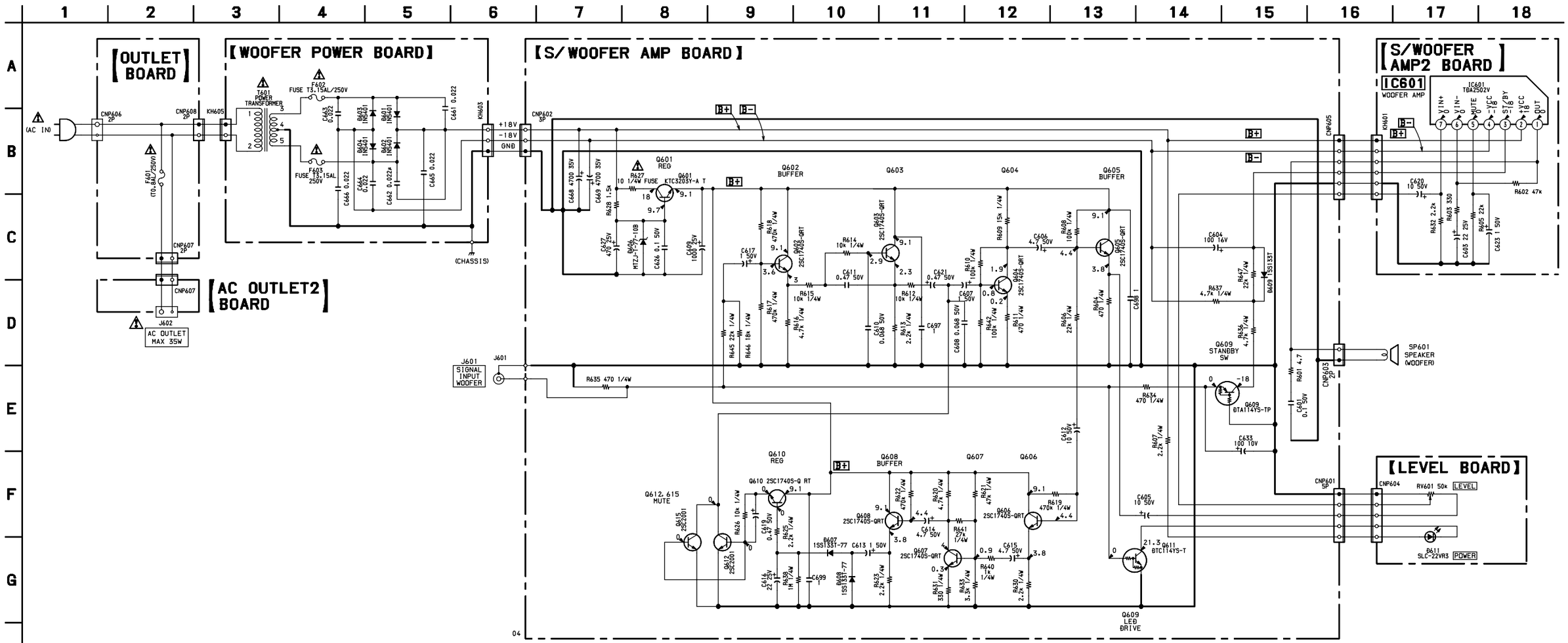
Note:
- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.







6-17. SCHEMATIC DIAGRAM — WOOFER SPEAKER SECTION — • Refer to page 64 for IC Block Diagrams.



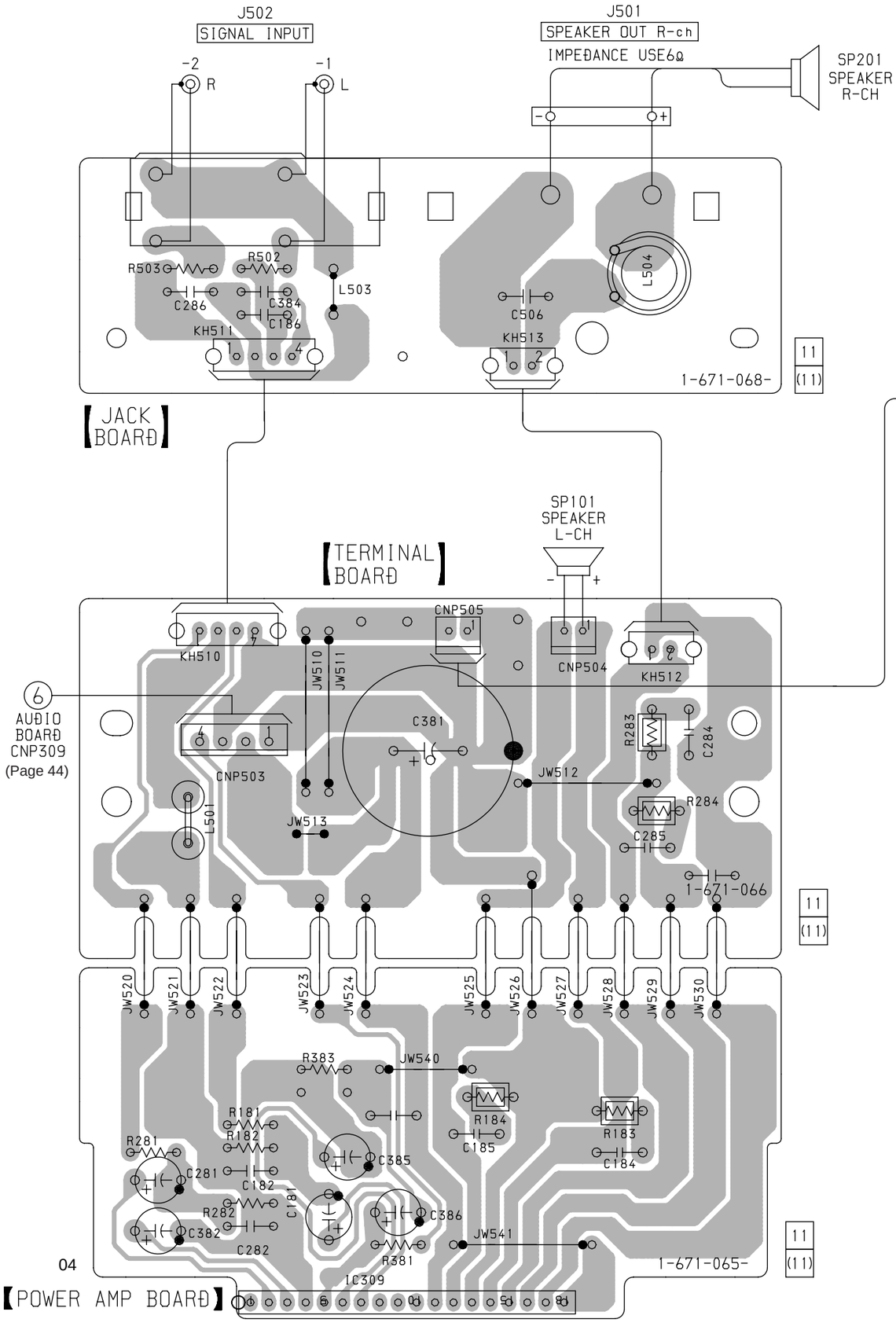
Note:

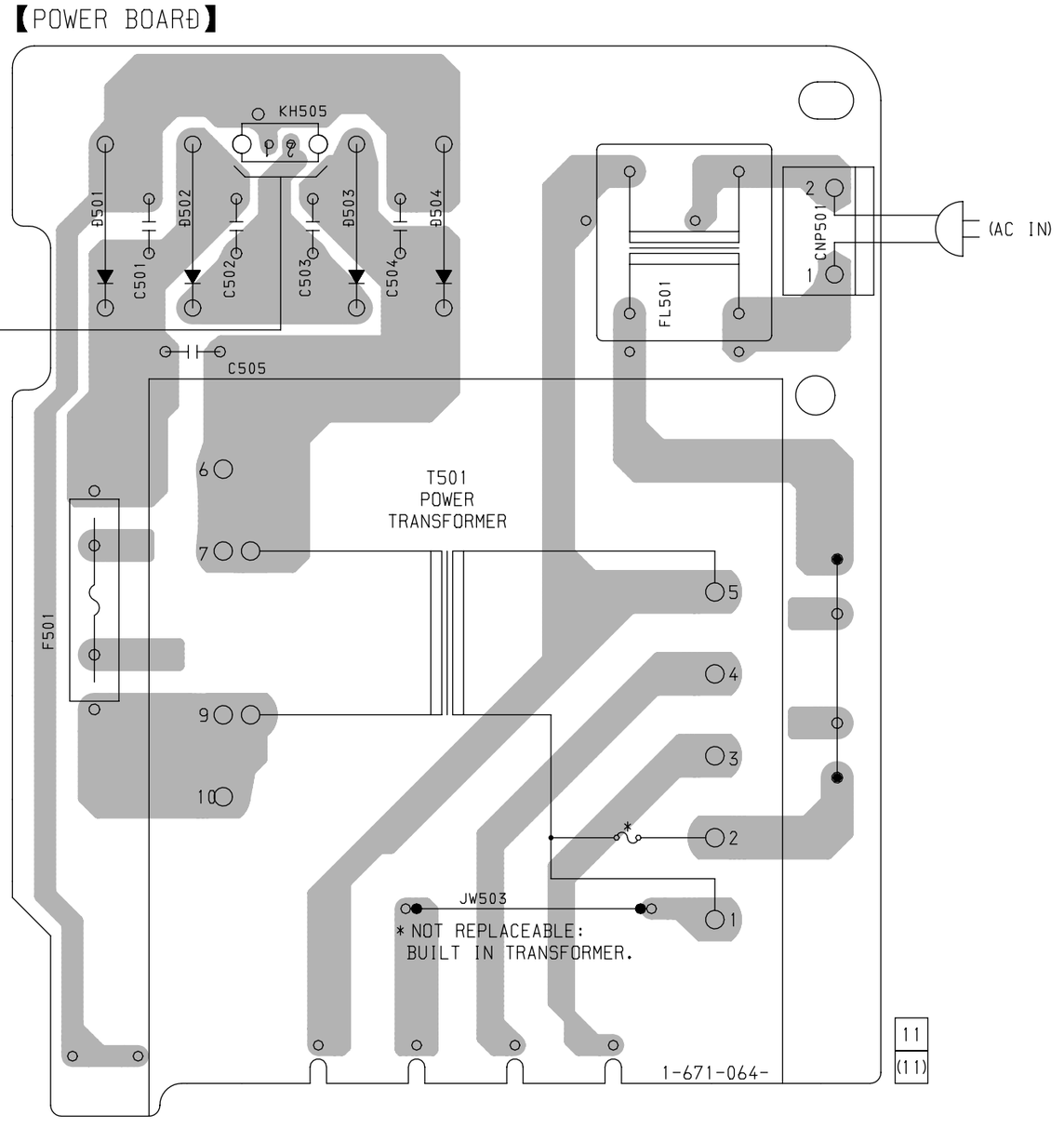
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- Voltages and waveforms are dc with respect to ground in playback mode.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

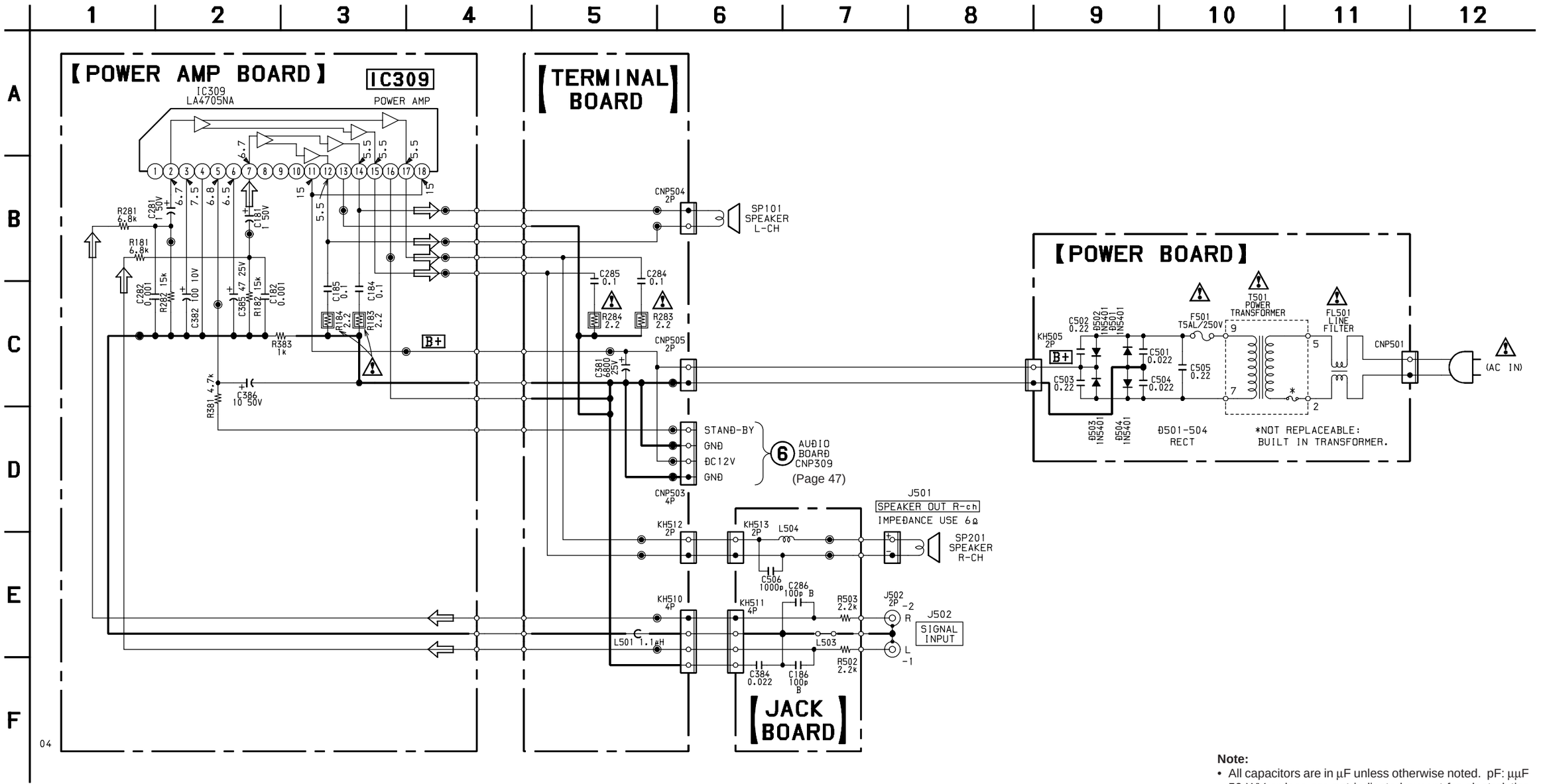
6-18. PRINTED WIRING BOARDS — POWER AMPLIFIER SECTION — • Refer to page 22 for Circuit Boards Location.





Note:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

6-19. SCHEMATIC DIAGRAM — POWER AMPLIFIER SECTION —



Note:

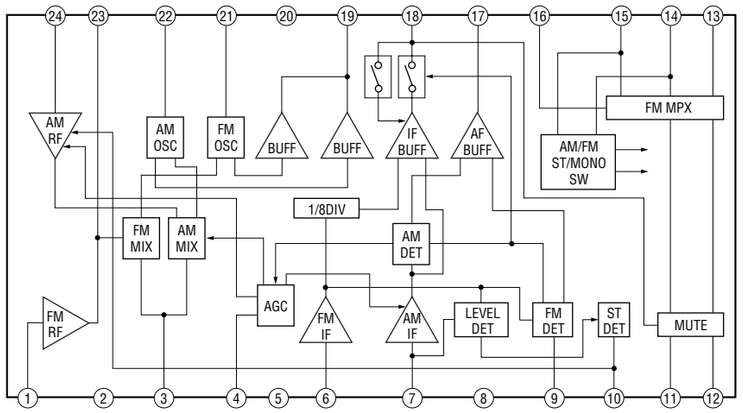
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ⏦ : nonflammable resistor.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

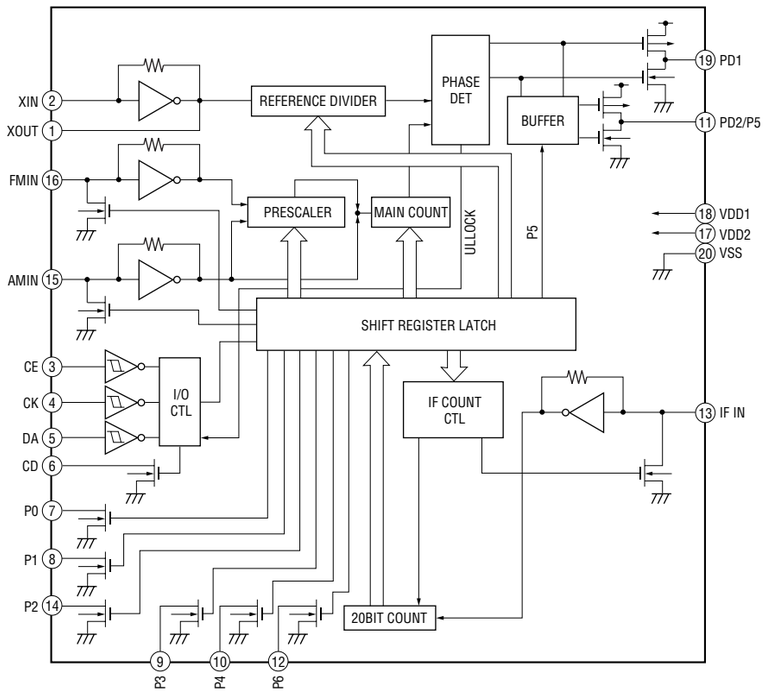
- **B+** : B+ Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM

• **IC Block Diagrams**

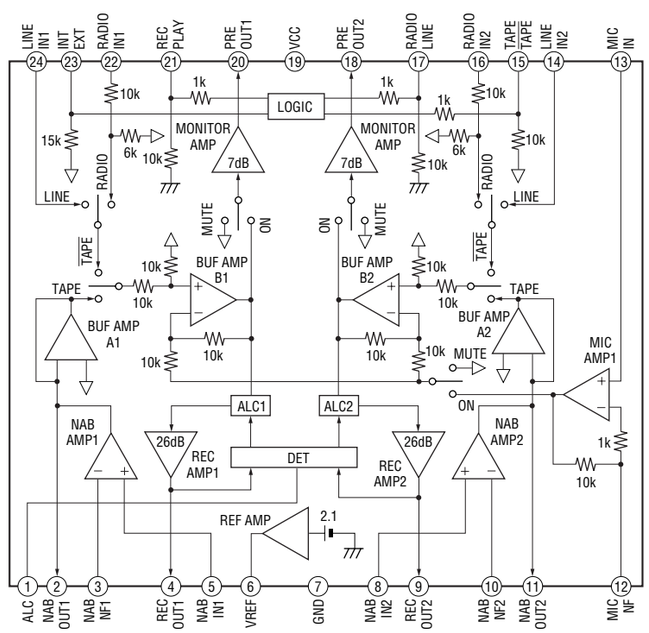
IC1 TA2008AN



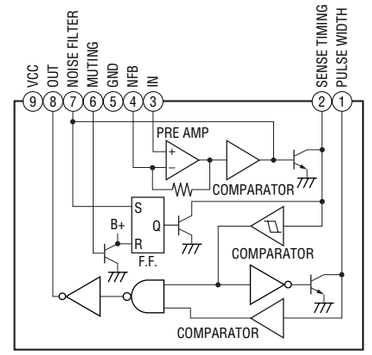
IC2 BU2615S



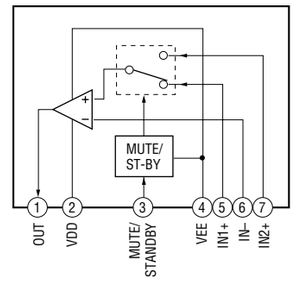
IC301 TA2068N



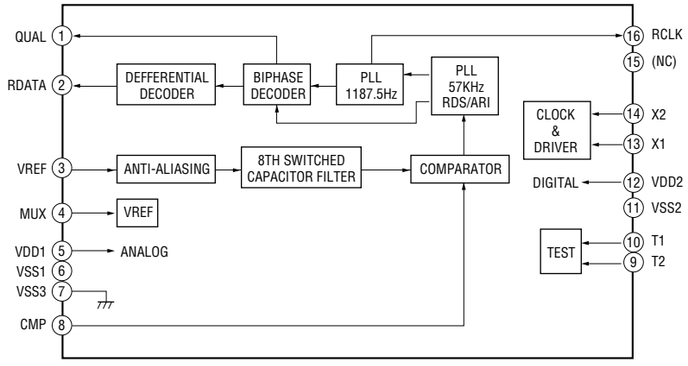
IC305 BA338



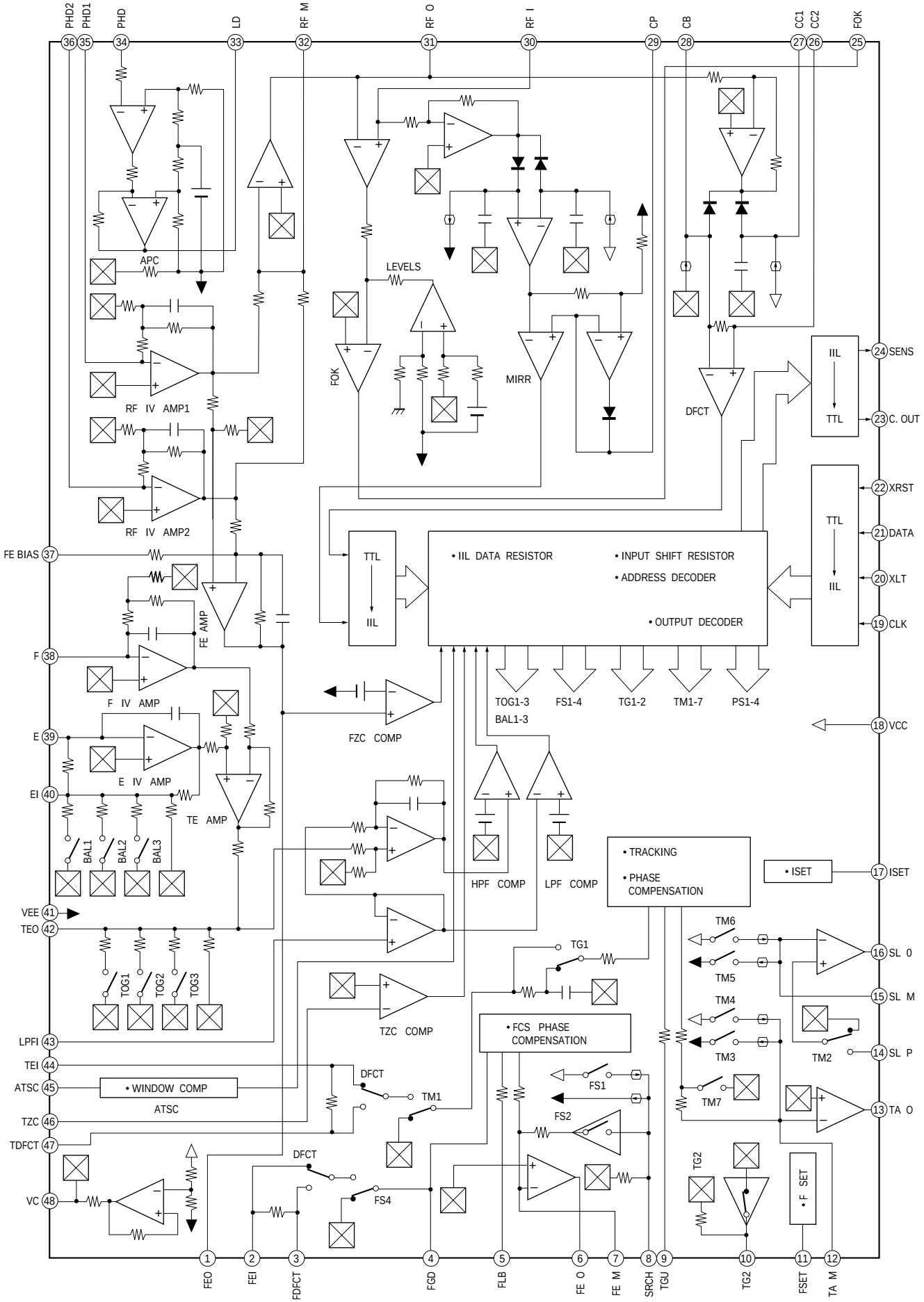
IC601 TDA2052V



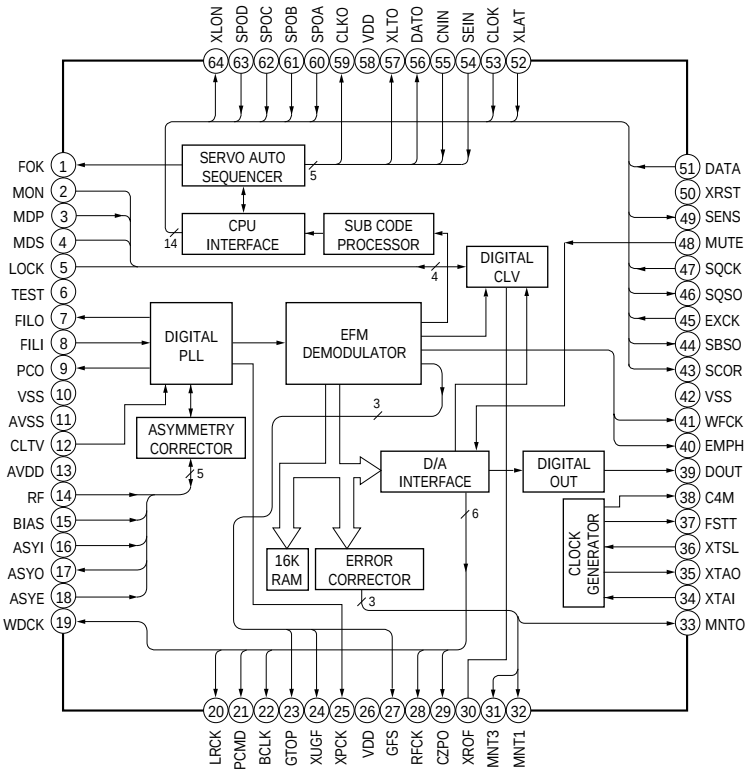
IC404 BU1924F



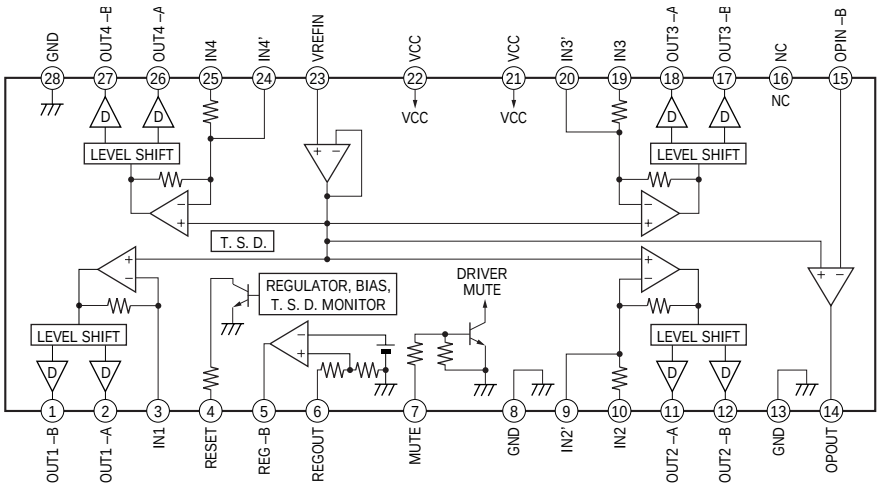
IC701 CXA1782BQ



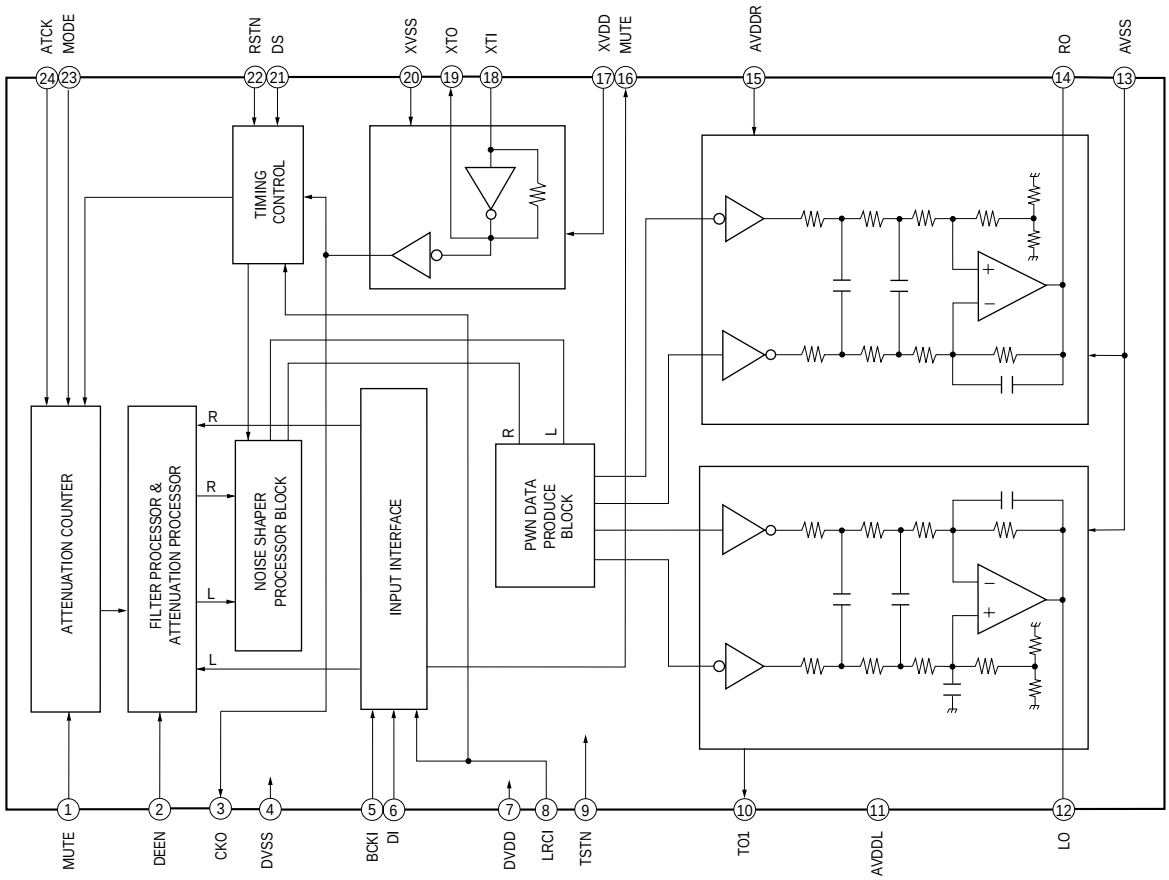
IC702 CXD2507AQ



IC703 BA6898FP



IC704 SM5877AM



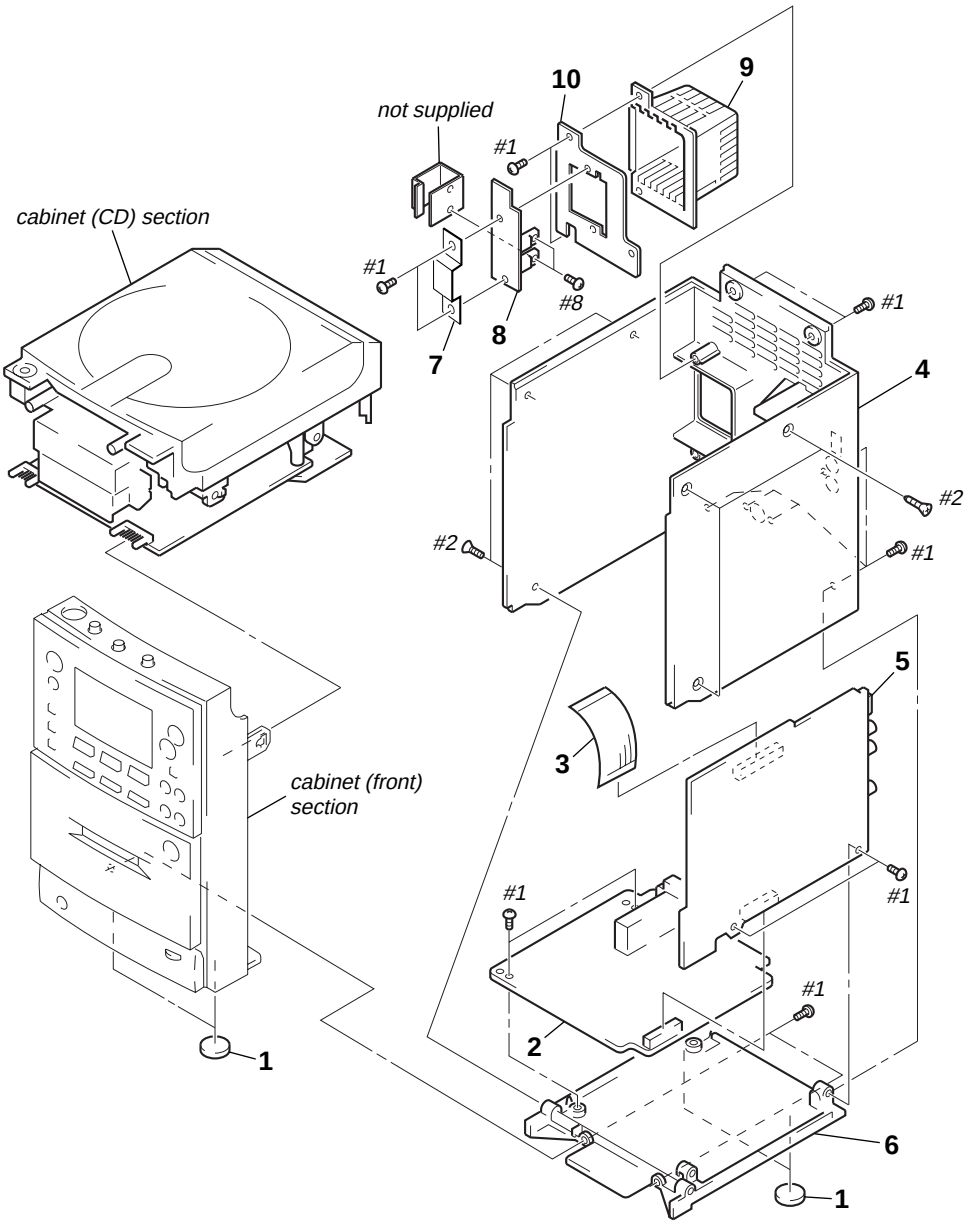
SECTION 7
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
  IT : Italian model
  CET : East European & CIS model
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

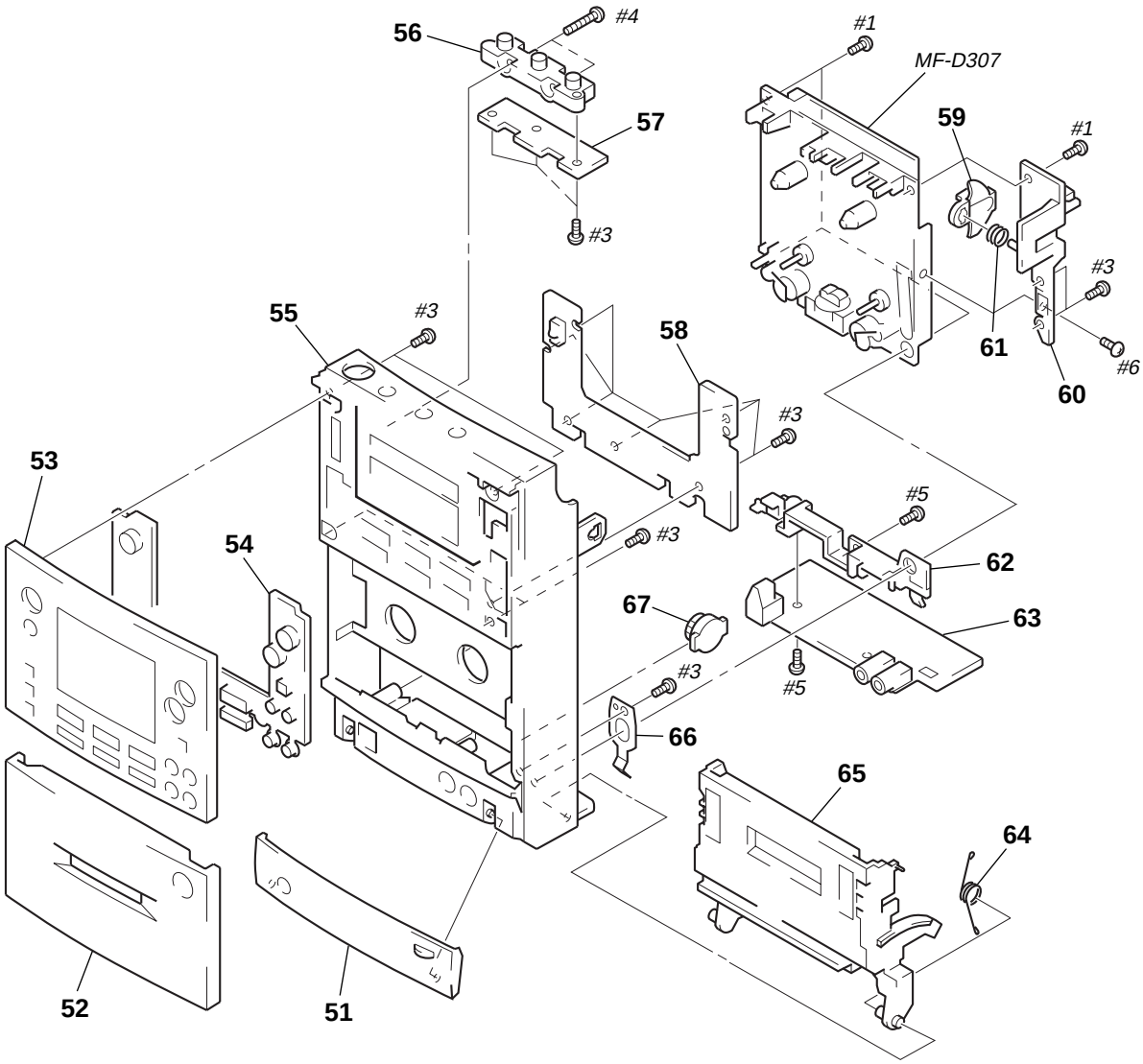
The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

7-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	3-014-503-01	FOOT	
* 2	A-3321-585-A	TUNER BOARD, COMPLETE	
3	1-782-296-11	WIRE, PARALLEL (FFC) (27 CORE)	
4	3-014-125-01	CABINET (REAR)	
* 5	A-3321-586-A	AUDIO BOARD, COMPLETE	
6	3-014-127-01	CASE (LOWER)	
7	3-031-341-01	SHEET, INSULATING (MAIN)	
* 8	1-672-059-11	REGULATOR BOARD	
* 9	3-031-261-01	COVER (MAIN), HEAT SINK	
* 10	3-031-262-01	BRACKET (HEAT SINK)	

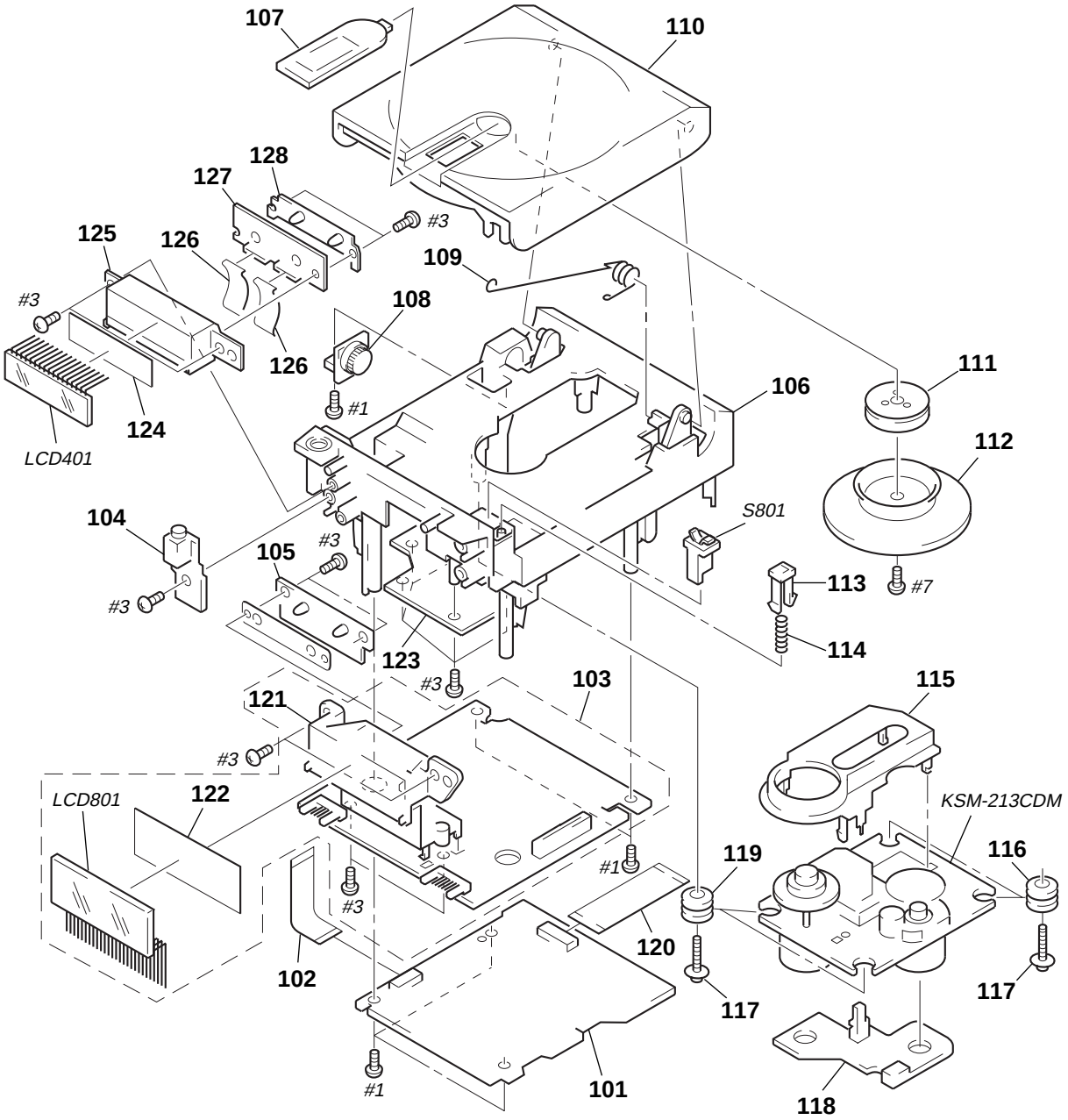
7-2. CABINET (FRONT) SECTION



Ref. No.	Part No.	Description	Remark
51	X-3373-799-1	LID (TERMINAL) ASSY	
52	X-3376-240-1	LID ASSY, CASSETTE	
53	X-3376-239-1	PANEL ASSY, FRONT	
54	3-028-250-01	BUTTON (MAIN)	
55	3-028-259-01	CABINET (FRONT)	
56	3-014-092-01	BUTTON (UPPER)	
* 57	1-671-486-11	SW2 BOARD	
* 58	1-671-485-11	SW1 BOARD	
59	3-014-097-01	PLATE (CASSETTE), LOCK	

Ref. No.	Part No.	Description	Remark
60	3-014-098-01	RETAINER (CASSETTE), LOCK	
61	3-013-735-01	SPRING, COMPRESSION	
62	3-014-100-01	HOLDER (TERMINAL)	
* 63	A-3321-584-A	LINE BOARD, COMPLETE	
64	3-014-102-01	SPRING (CASSETTE)	
65	3-014-096-01	HOLDER (CASSETTE)	
66	3-014-103-01	SPRING (TERMINAL LID)	
67	3-343-248-01	DAMPER (P), SMALL	

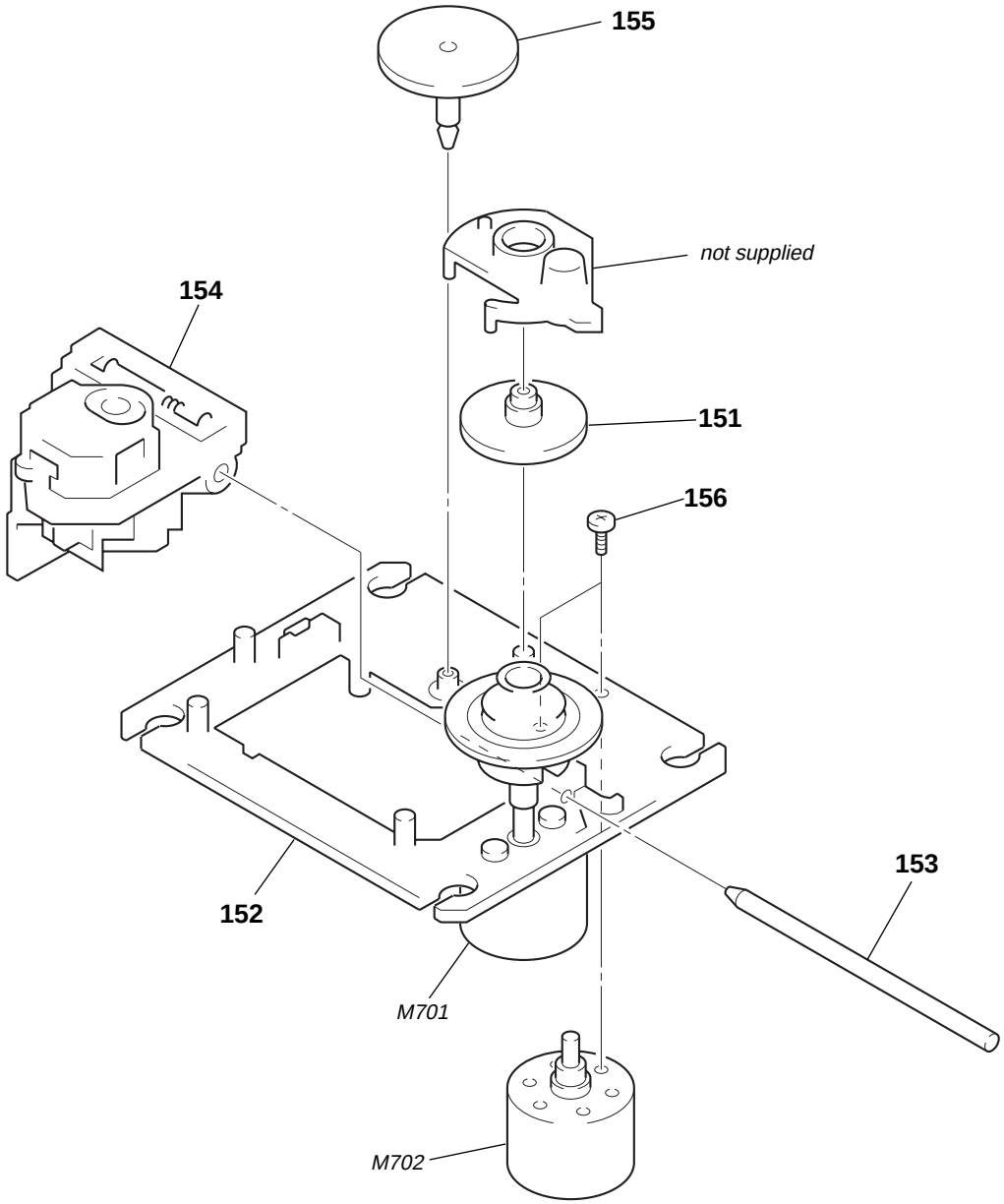
7-3. CABINET (CD) SECTION



Ref. No.	Part No.	Description	Remark
* 101	A-3321-587-A	CD BOARD, COMPLETE	
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)	
* 103	A-3321-588-A	SYSTEM BOARD, COMPLETE	
* 104	1-671-487-11	H/P BOARD	
* 105	1-671-497-11	LAMP1 BOARD	
106	3-028-495-01	CHASSIS (CD)	
107	3-014-129-01	WINDOW (CD)	
108	3-351-377-11	DAMPER	
109	3-014-128-01	SPRING (CD)	
110	3-014-124-01	LID (CD)	
111	1-452-732-11	MAGNET	
112	3-910-112-01	PLATE (KSM-213-CDM), CHUCKING	
113	3-014-131-01	LEVER	
* 114	3-014-132-01	SPRING, COMPRESSION	
115	3-910-116-01	COVER, CD	
116	3-910-095-31	RUBBER, VIBRATION PROOF	

Ref. No.	Part No.	Description	Remark
117	3-916-006-01	SCREW (2.6X16)	
* 118	1-639-678-12	CD MOTOR BOARD	
119	3-931-379-01	RUBBER, VIBRATION PROOF	
120	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
121	3-028-260-01	HOLDER, LCD	
122	3-028-491-01	ILLUMINATOR	
* 123	A-3321-617-A	RDS BOARD, COMPLETE	
124	3-028-490-01	ILLUMINATOR (RDS)	
125	3-028-492-01	HOLDER (RDS), LCD	
126	1-783-983-11	WIRE, PARALLEL (19 CORE)	
* 127	1-671-496-11	RDS.LCD BOARD	
* 128	1-671-498-11	LAMP2 BOARD	
LCD401	1-803-161-11	DISPLAY PANEL, LIQUID CRYSTAL (RDS)	
LCD801	1-803-162-11	DISPLAY PANEL, LIQUID CRYSTAL	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (⏏ PUSH OPEN/CLOSE)	

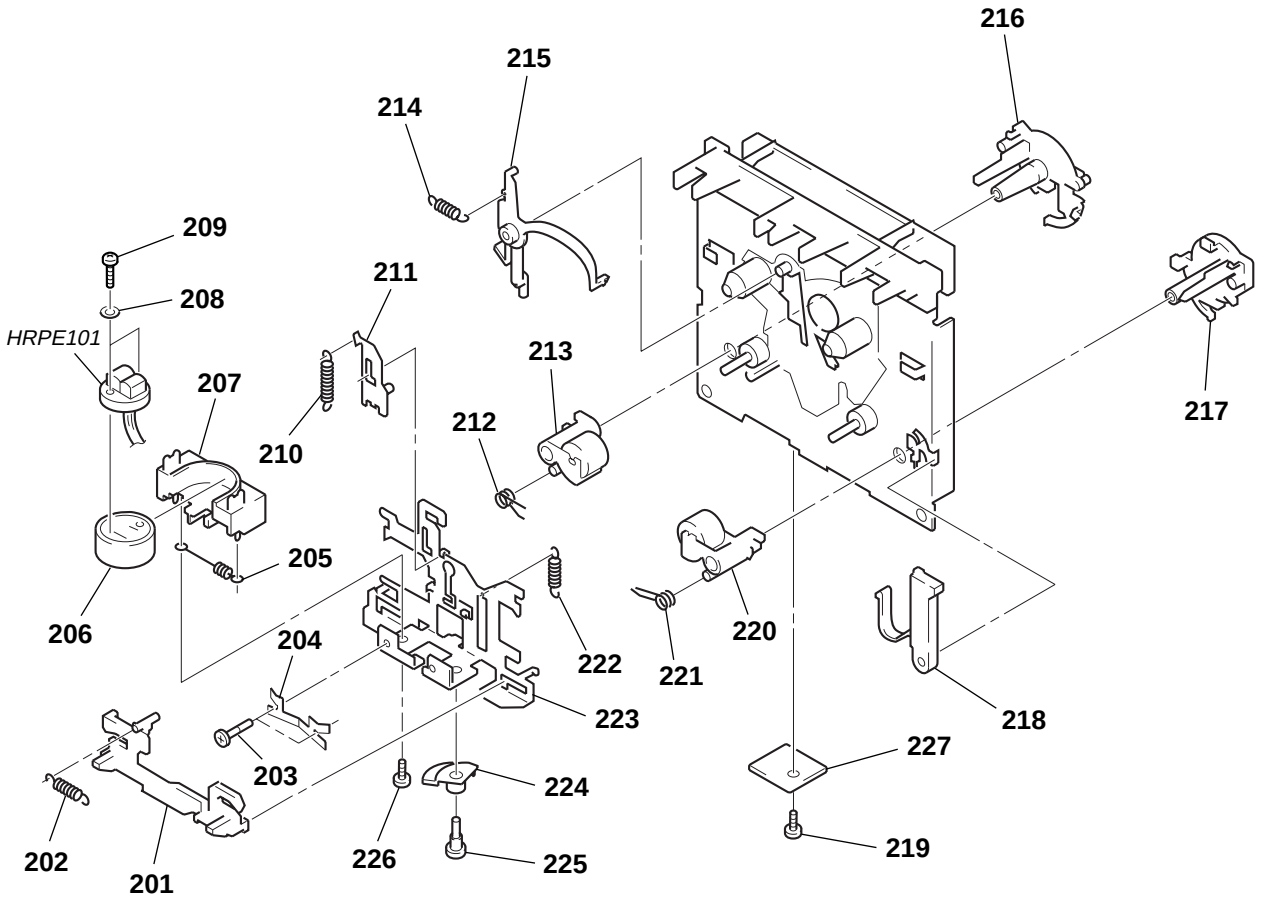
7-4. OPTICAL PICK-UP SECTION (KSM-213CDM)



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
151	2-627-003-02	GEAR (B) (RP)	
152	X-2626-202-2	CHASSIS ASSY (MB), MOTOR (SPINDLE) (INCLUDING M701)	
153	2-626-908-01	SHAFT, SLED	
⚠154	8-848-483-08	PICK-UP, OPTICAL KSS-213C/Z-N	
155	2-626-907-01	GEAR (A)	
156	3-713-786-51	SCREW +P 2X3	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	

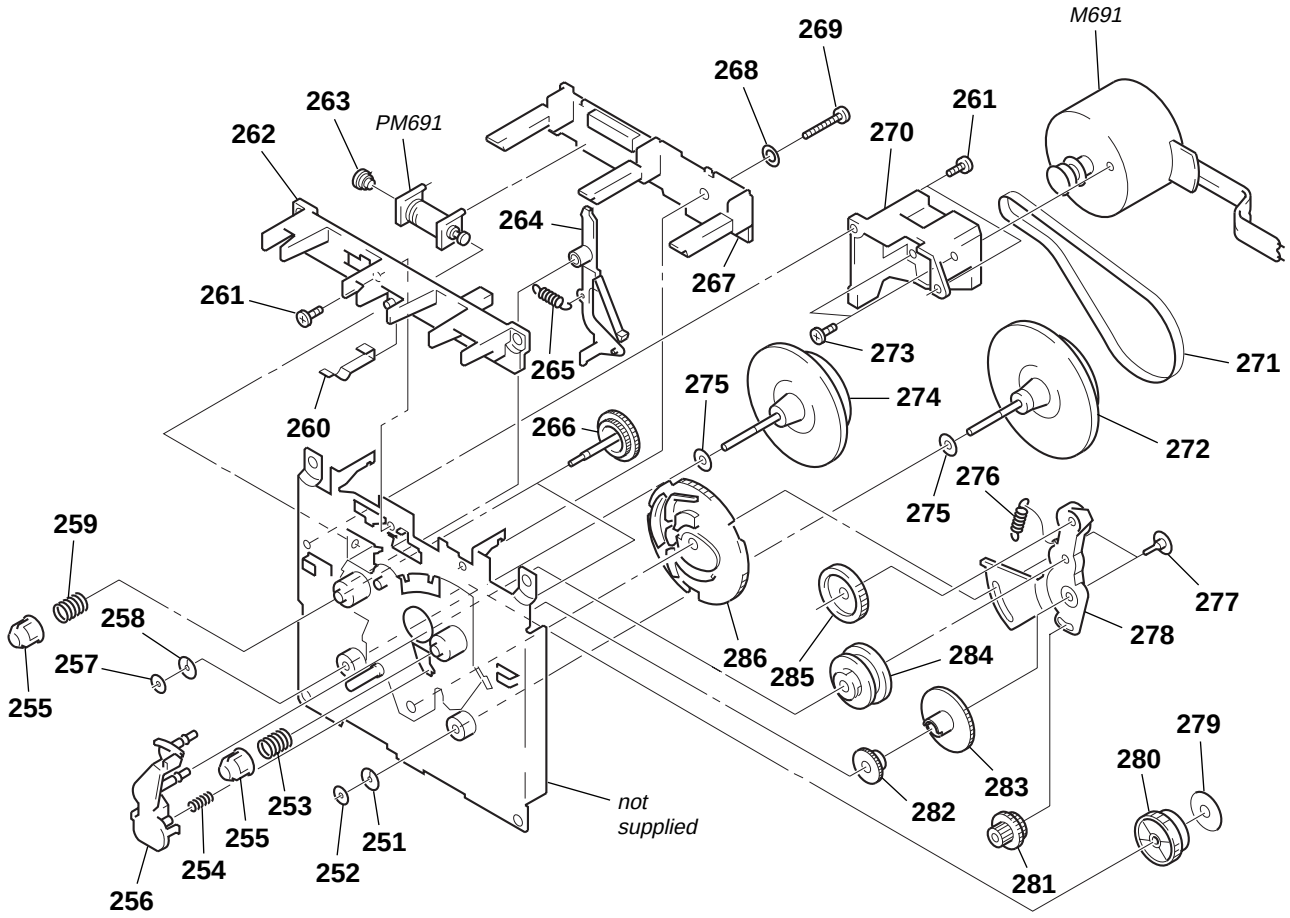
7-5. TAPE MECHANISM DECK SECTION-1 (MF-D307)



Ref. No.	Part No.	Description	Remark
201	3-938-905-01	HEAD, LEVER	
202	3-938-940-01	SPRING (L)	
203	3-938-941-01	SCREW (A)	
204	3-938-906-01	AZIMUTH, SPRING	
205	3-017-432-01	SPRING (A)	
206	3-938-901-01	HEAD, HOLDER	
* 207	3-938-904-01	HEAD, FRAME	
208	3-938-902-01	WASHER	
209	3-938-903-01	SCREW	
210	3-938-935-01	SPRING (G)	
* 211	X-3372-610-1	ASSIST ASSY, LEVER	
212	3-938-933-01	SPRING (E)	
213	3-017-592-01	ARM (PINCH L) ASSY	
214	3-938-934-01	SPRING (F)	

Ref. No.	Part No.	Description	Remark
* 215	3-938-916-01	BRAKE, ARM	
* 216	3-938-914-01	FRAME (C)	
* 217	3-938-913-01	FRAME (B)	
* 218	3-938-909-01	LOCK, EJECT	
219	3-938-944-01	SCREW (D)	
220	3-017-591-01	ARM (PINCH R) ASSY	
221	3-938-937-01	SPRING (I)	
222	3-938-938-01	SPRING (J)	
* 223	3-938-911-01	HEAD (B), CHASSIS	
224	3-938-907-01	HEAD, GEAR ARM	
225	3-938-943-01	SCREW (C)	
226	3-938-942-01	SCREW (B)	
* 227	1-662-743-11	HEAD BOARD	
HRPE101	1-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)	

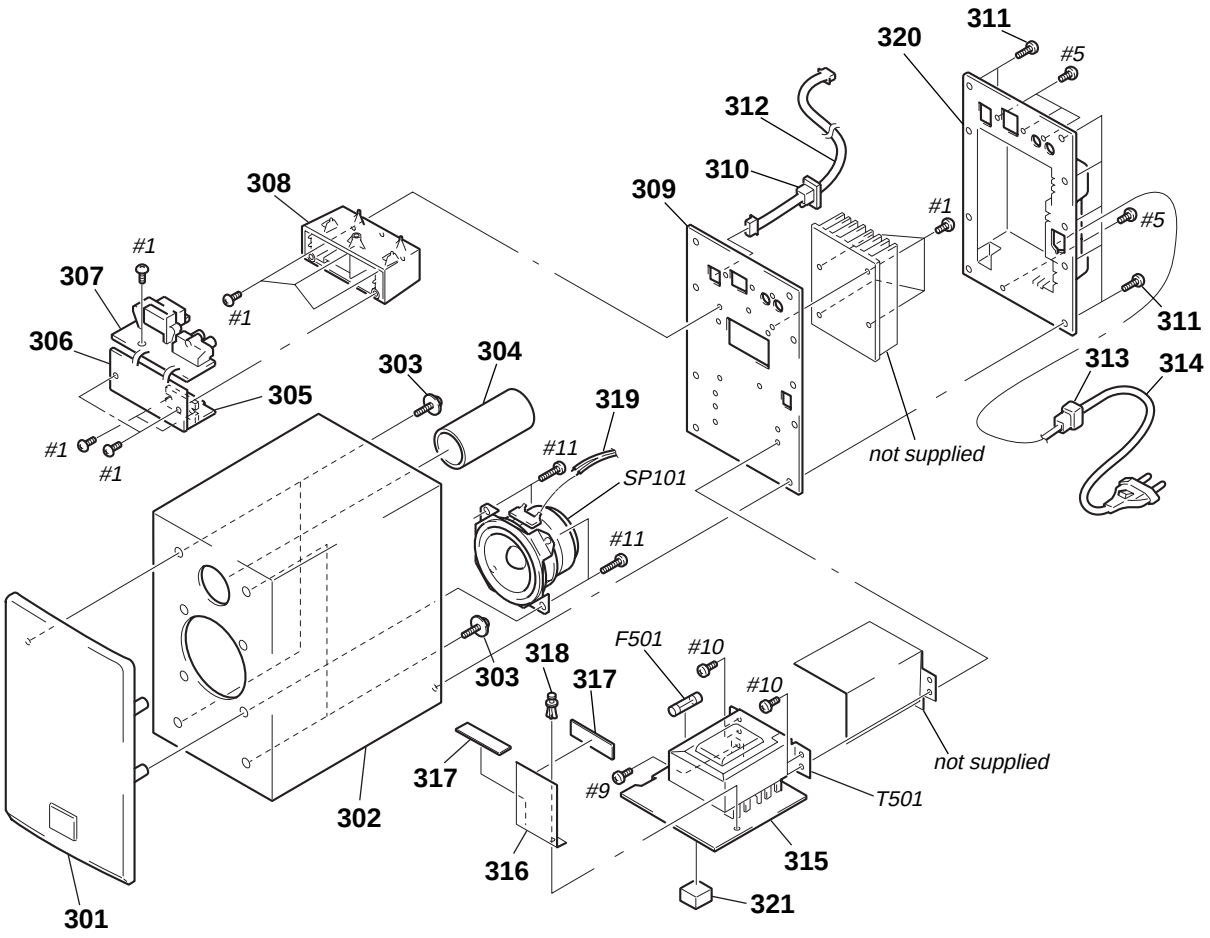
7-6. TAPE MECHANISM DECK SECTION-2 (MF-D307)



Ref. No.	Part No.	Description	Remark
251	3-938-949-01	WASHER (B)	
252	3-938-951-01	WASHER (D)	
253	3-938-936-01	SPRING (H)	
254	3-938-930-01	SPRING (B)	
255	3-938-910-01	REEL, CAP	
* 256	3-938-912-01	ARM (UD)	
257	3-938-952-01	WASHER (E)	
258	3-938-948-01	WASHER (A)	
259	3-938-932-01	SPRING (D)	
260	3-938-908-01	CASSETTE, SPRING	
261	3-938-945-01	SCREW (E)	
262	3-017-428-01	FRAME (D)	
263	3-938-920-01	PLUNGER, K	
* 264	3-938-918-01	TRIGGER, ARM	
265	3-938-931-01	SPRING (C)	
266	3-938-921-01	GEAR (REEL)	
* 267	1-662-742-11	SW BOARD	
268	3-938-954-01	WASHER (G)	
269	3-938-947-01	SCREW (G)	

Ref. No.	Part No.	Description	Remark
270	3-017-431-01	BRACKET (MM)	
271	3-017-430-01	BELT	
272	3-017-596-01	FLYWHEEL (R) ASSY	
273	3-017-434-01	SCREW (H)	
274	3-017-595-01	FLYWHEEL (L) ASSY	
275	3-938-950-01	WASHER (C)	
276	3-017-433-01	SPRING (K)	
277	3-938-946-01	SCREW (F)	
* 278	3-938-919-01	ARM (FR)	
279	3-017-435-01	REFLECTOR	
280	3-017-429-01	GEAR (REF)	
281	3-938-917-01	GEAR (A)	
282	3-938-924-01	GEAR (P)	
283	3-938-923-01	GEAR (FR)	
284	X-3372-613-1	CLUTCH ASSY	
285	3-938-925-01	GEAR (IDL)	
286	3-938-922-01	GEAR (CAM)	
M691	3-016-425-01	MOTOR ASSY (CAPSTAN/REEL)	
PM691	1-454-806-11	SOLENOID, PLUNGER	

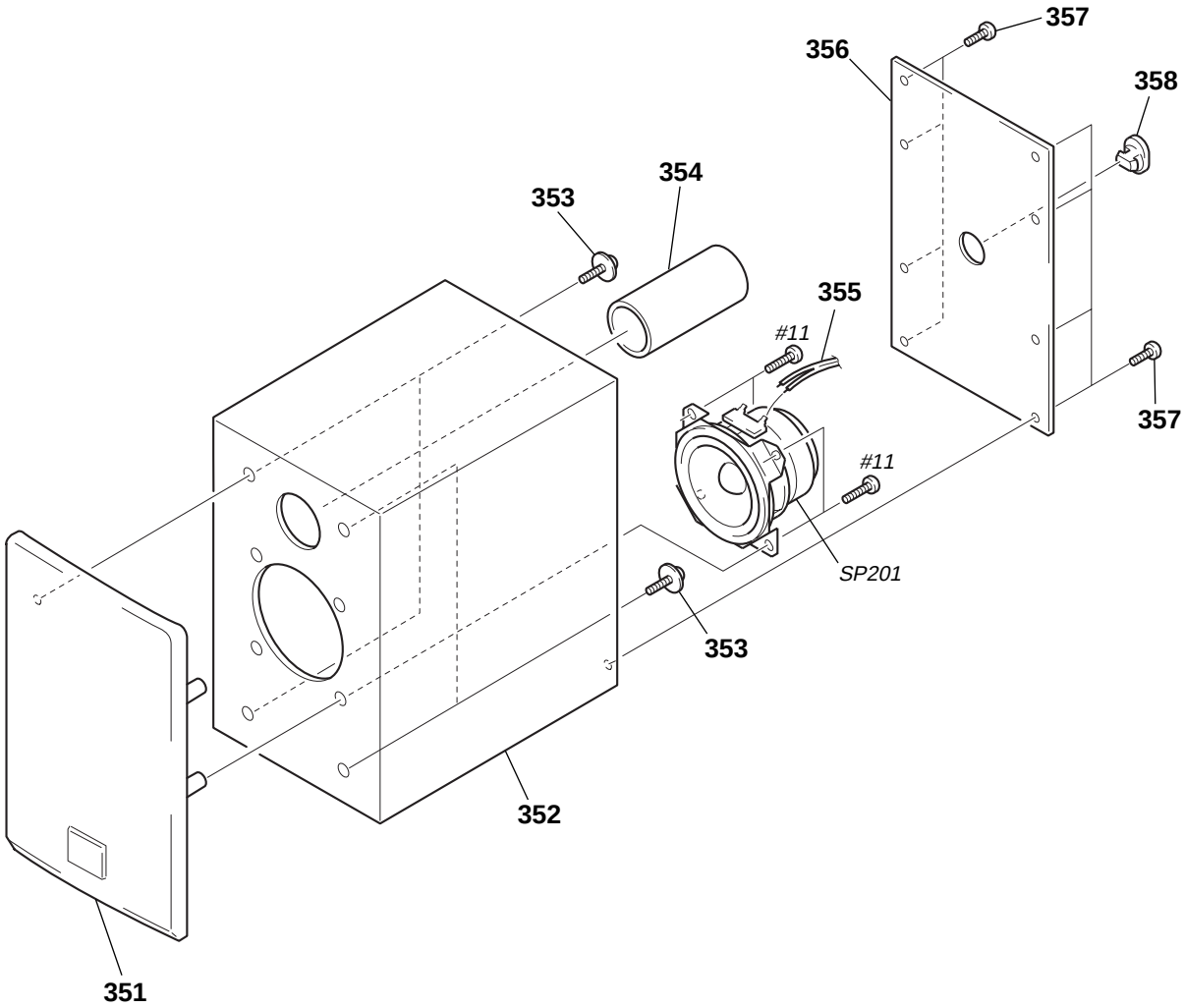
7-7. SPEAKER (L) SECTION



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
301	X-3376-076-1	SPEAKER (FRONT) SUB ASSY	
302	3-028-031-01	BOX, SPEAKER (AEP)	
302	3-028-031-11	BOX, SPEAKER (IT,CET)	
303	3-365-853-01	SCREW (+BTPWH) (3X12)	
304	3-028-028-01	DUCT (SPEAKER)	
* 305	1-671-065-11	POWER AMP BOARD	
* 306	1-671-066-11	TERMINAL BOARD	
* 307	1-671-068-11	JACK BOARD	
308	3-028-034-01	BRACKET (AMP)	
309	3-028-029-01	CHASSIS (L), REAR	
* 310	3-014-106-01	BUSHING (4P), CORD	
311	3-029-171-01	SCREW, +B TAPPING	
312	X-3374-496-1	CORD ASSY	
313	3-703-244-11	BUSHING (2104), CORD	
⚠ 314	1-575-651-11	CORD, POWER	
* 315	1-671-064-11	POWER BOARD	
* 316	3-017-037-01	INSULATOR	
317	3-568-749-00	CUSHION, ECM	
318	4-812-134-11	RIVET (DIA. 3.5), NYLON	
319	1-790-161-11	CORD, SPEAKER	
320	3-028-032-01	COVER (HEAT SINK)	
321	3-031-459-01	CUSHION (RT), RUBBER	
⚠ F501	1-532-505-31	FUSE, TIME-LAG (T5AL/250V)	
SP101	1-505-607-11	SPEAKER (8cm) (L-CH)	
⚠ T501	1-433-453-11	TRANSFORMER, POWER (SET)	

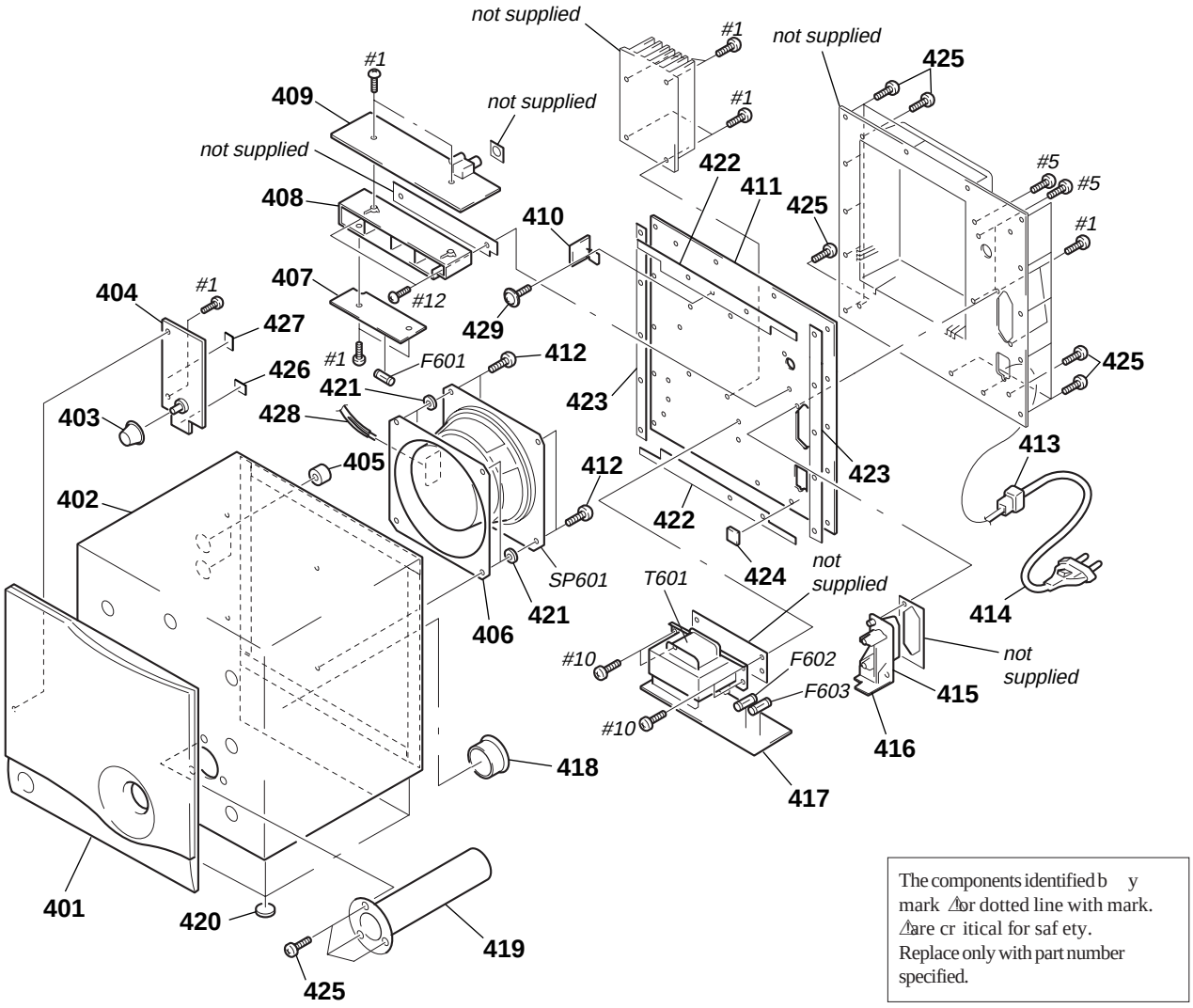
7-8. SPEAKER (R) SECTION



Ref. No.	Part No.	Description	Remark
351	X-3376-076-1	SPEAKER (FRONT) SUB ASSY	
352	3-028-031-01	BOX, SPEAKER (AEP)	
352	3-028-031-11	BOX, SPEAKER (IT,CET)	
353	3-365-853-01	SCREW (+BTPWH) (3X12)	
354	3-028-028-01	DUCT (SPEAKER)	
355	1-790-161-11	CORD, SPEAKER	

Ref. No.	Part No.	Description	Remark
356	3-028-030-01	PANEL (R), REAR (AEP)	
356	3-028-030-11	PANEL (R), REAR (IT,CET)	
357	3-029-171-01	SCREW, +B TAPPING	
358	3-014-109-01	STOPPER, CORD	
SP201	1-505-607-11	SPEAKER (8cm) (R-CH)	

7-9. WOOFER SPEAKER SECTION



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
401	3-028-253-01	PANEL (SW)	
402	3-028-255-01	BOX (SW), SPEAKER (AEP,CET)	
402	3-028-255-11	BOX (SW), SPEAKER (IT)	
403	3-028-254-01	KNOB, VOL	
* 404	1-671-494-11	LEVEL BOARD	
405	3-028-991-01	PACKING (WIRE)	
406	3-028-992-01	PACKING (SPEAKER)	
* 407	1-671-493-11	OUTLET BOARD	
408	3-028-256-01	HOLDER (SW), AMP	
* 409	A-3321-676-A	S/WOOFER AMP BOARD, COMPLETE	
* 410	1-672-061-11	S/WOOFER AMP2 BOARD	
411	3-028-257-01	CHASSIS (SW), REAR	
412	3-029-171-01	SCREW, +B TAPPING	
413	3-703-244-11	BUSHING (2104), CORD	
⚠ 414	1-575-651-11	CORD, POWER	
⚠ 415	1-785-575-11	SOCKET, AC	
* 416	1-672-060-11	AC OUTLET2 BOARD	
* 417	1-671-492-11	WOOFER POWER BOARD	

Ref. No.	Part No.	Description	Remark
418	3-030-375-01	HOLDER, DUCT	
419	3-028-252-01	DUCT (SW)	
420	3-031-264-01	FOOT (SW)	
421	3-029-240-01	CUSHION (4), SPEAKER	
422	3-028-994-01	PACKING (2) (REAR)	
423	3-028-993-01	PACKING (1) (REAR)	
424	3-031-265-01	CUSHION, RUBBER (SW)	
425	3-029-171-01	SCREW, +B TAPPING	
426	3-031-572-01	CUSHION (VOL), RUBBER	
427	3-031-459-01	CUSHION (PT), RUBBER	
428	1-790-161-11	CORD, SPEAKER	
429	3-031-669-01	SCREW, +BVPWH TAPPING	
⚠ F601	1-532-501-31	FUSE, TIME-LAG (T0.8AL/250V)	
⚠ F602	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
⚠ F603	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
SP601	1-529-134-11	SPEAKER (WOOFER)	
⚠ T601	1-433-450-11	TRANSFORMER, POWER (SUPER WOOFER)	

SECTION 8
ELECTRICAL PARTS LIST

AC OUTLET2 **AUDIO**

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA.. : μA.. uPA.. : μPA..
  uPB.. : μPB.. uPC.. : μPC.. uPD.. : μPD..
- CAPACITORS
  uF : μF
- COILS
  uH : μH

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

- Abbreviation
  IT : Italian model
  CET : East European & CIS model

Ref. No.	Part No.	Description			Remark
*	1-672-060-11	AC OUTLET2 BOARD			
		**********			
		< CONNECTOR >			
CNP607	1-564-321-00	PIN, CONNECTOR 2P			
		< AC SOCKET >			
⚠ J602	1-785-575-11	SOCKET, AC (AC OUTLET MAX 35V)			
**********					
*	A-3321-586-A	AUDIO BOARD, COMPLETE			
		**********			
	7-685-871-01	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C101	1-162-294-31	CERAMIC	0.001uF	10%	50V
C102	1-104-664-11	ELECT	47uF	20%	10V
C103	1-137-442-11	FILM	0.039uF	5%	50V
C104	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C105	1-162-215-31	CERAMIC	47PF	5%	50V
C106	1-126-959-11	ELECT	0.47uF	20%	50V
C108	1-126-959-11	ELECT	0.47uF	20%	50V
C112	1-126-964-11	ELECT	10uF	20%	50V
C141	1-126-964-11	ELECT	10uF	20%	50V
C142	1-162-294-31	CERAMIC	0.001uF	10%	50V
C143	1-126-964-11	ELECT	10uF	20%	50V
C144	1-162-850-11	CERAMIC	0.082uF	10%	16V
C145	1-162-850-11	CERAMIC	0.082uF	10%	16V
C146	1-162-839-11	CERAMIC	0.01uF	10%	16V
C147	1-126-964-11	ELECT	10uF	20%	50V
C152	1-162-294-31	CERAMIC	0.001uF	10%	50V
C153	1-104-664-11	ELECT	47uF	20%	10V
C155	1-107-909-11	ELECT	47uF	20%	10V
C156	1-162-282-31	CERAMIC	100PF	10%	50V
C201	1-162-294-31	CERAMIC	0.001uF	10%	50V
C202	1-104-664-11	ELECT	47uF	20%	10V
C203	1-137-442-11	FILM	0.039uF	5%	50V
C204	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C205	1-162-215-31	CERAMIC	47PF	5%	50V
C206	1-126-959-11	ELECT	0.47uF	20%	50V
C208	1-126-959-11	ELECT	0.47uF	20%	50V
C210	1-162-282-31	CERAMIC	100PF	10%	50V
C212	1-126-964-11	ELECT	10uF	20%	50V
C241	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C242	1-162-294-31	CERAMIC	0.001uF	10%	50V
C243	1-126-964-11	ELECT	10uF	20%	50V
C244	1-162-850-11	CERAMIC	0.082uF	10%	16V
C245	1-162-850-11	CERAMIC	0.082uF	10%	16V
C246	1-162-839-11	CERAMIC	0.01uF	10%	16V
C247	1-126-964-11	ELECT	10uF	20%	50V
C252	1-162-294-31	CERAMIC	0.001uF	10%	50V
C253	1-104-664-11	ELECT	47uF	20%	10V
C255	1-107-909-11	ELECT	47uF	20%	10V
C256	1-162-282-31	CERAMIC	100PF	10%	50V
C301	1-104-665-11	ELECT	100uF	20%	10V
C302	1-126-925-11	ELECT	470uF	20%	10V
C303	1-126-963-11	ELECT	4.7uF	20%	50V
C304	1-104-665-11	ELECT	100uF	20%	10V
C307	1-161-494-00	CERAMIC	0.022uF		25V
C311	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C312	1-104-664-11	ELECT	47uF	20%	10V
C313	1-137-350-11	MYLAR	0.015uF	10%	100V
C314	1-162-294-31	CERAMIC	0.001uF	10%	50V
C315	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C316	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C324	1-126-961-11	ELECT	2.2uF	20%	50V
C325	1-126-961-11	ELECT	2.2uF	20%	50V
C326	1-126-963-11	ELECT	4.7uF	20%	50V
C327	1-104-664-11	ELECT	47uF	20%	10V
C328	1-126-959-11	ELECT	0.47uF	20%	50V
C329	1-137-189-11	FILM	0.18uF	5%	50V
C333	1-104-664-11	ELECT	47uF	20%	10V
C334	1-126-963-11	ELECT	4.7uF	20%	50V
C335	1-126-960-11	ELECT	1uF	20%	50V
C336	1-126-961-11	ELECT	2.2uF	20%	50V
C337	1-104-665-11	ELECT	100uF	20%	10V
C338	1-161-494-00	CERAMIC	0.022uF		25V
C339	1-161-494-00	CERAMIC	0.022uF		25V
C340	1-162-290-31	CERAMIC	470PF	10%	50V
C341	1-162-290-31	CERAMIC	470PF	10%	50V
C342	1-162-290-31	CERAMIC	470PF	10%	50V
C344	1-162-282-31	CERAMIC	100PF	10%	50V
C345	1-162-306-11	CERAMIC	0.01uF	30%	16V
C346	1-162-306-11	CERAMIC	0.01uF	30%	16V
C347	1-126-925-11	ELECT	470uF	20%	10V
C348	1-126-959-11	ELECT	0.47uF	20%	50V
C350	1-162-306-11	CERAMIC	0.01uF	30%	16V
C351	1-104-652-11	ELECT	470uF	20%	10V
C352	1-104-665-11	ELECT	100uF	20%	10V

AUDIO

Ref. No.	Part No.	Description			Remark
C353	1-126-940-11	ELECT	330uF	20%	25V
C355	1-104-664-11	ELECT	47uF	20%	10V
C356	1-161-494-00	CERAMIC	0.022uF		25V
C357	1-104-665-11	ELECT	100uF	20%	10V
C358	1-161-494-00	CERAMIC	0.022uF		25V
C359	1-126-964-11	ELECT	10uF	20%	50V
C360	1-161-494-00	CERAMIC	0.022uF		25V
C397	1-126-964-11	ELECT	10uF	20%	50V
C398	1-126-964-11	ELECT	10uF	20%	50V
C399	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CNP301	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
* CNP303	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
CNP304	1-573-826-11	CONNECTOR, BOARD TO BOARD 12P			
* CNP305	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CNP306	1-569-312-11	SOCKET, CONNECTOR (L TYRE) 27P			
* CNP307	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
* CNP309	1-779-536-11	PLUG, CONNECTOR 4P (POWER IN)			
CNP310	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CNP311	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D302	8-719-991-33	DIODE 1SS133T-77			
D304	8-719-991-33	DIODE 1SS133T-77			
D305	8-719-991-33	DIODE 1SS133T-77			
D307	8-719-991-33	DIODE 1SS133T-77			
D308	8-719-991-33	DIODE 1SS133T-77			
D309	8-719-991-33	DIODE 1SS133T-77			
D310	8-719-991-33	DIODE 1SS133T-77			
D311	8-719-110-09	DIODE RD8.2ES-B3			
D312	8-719-991-33	DIODE 1SS133T-77			
D313	8-719-109-89	DIODE RD5.6ESB2			
D314	8-719-991-33	DIODE 1SS133T-77			
D315	8-719-921-89	DIODE MTZJ-13C			
D316	8-719-991-33	DIODE 1SS133T-77			
D317	8-719-991-33	DIODE 1SS133T-77			
D318	8-719-991-33	DIODE 1SS133T-77			
D319	8-719-991-33	DIODE 1SS133T-77			
D320	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC301	8-759-264-71	IC TA2068N			
IC302	8-759-432-41	IC BH3854AS			
IC303	8-759-701-54	IC NJM2073D			
IC305	8-759-905-47	IC BA338			
		< JACK >			
J302	1-770-612-12	JACK, PIN 2P (SIGNAL OUTPUT)			
J303	1-784-910-31	JACK, PIN 1P (SIGNAL OUTPUT WOOFER)			

Ref. No.	Part No.	Description	Remark
		< FERRITE BEAD >	
JW121	1-410-397-21	FERRITE BEAD INDUCTOR 1.1uH	
L154	1-410-397-21	FERRITE BEAD INDUCTOR 1.1uH	
L254	1-410-397-21	FERRITE BEAD INDUCTOR 1.1uH	
		< CONNECTOR >	
* P301	1-564-187-00	PIN, CONNECTOR	
* P302	1-564-187-00	PIN, CONNECTOR	
		< TRANSISTOR >	
Q102	8-729-900-74	TRANSISTOR DTC143TS	
Q103	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q131	8-729-900-74	TRANSISTOR DTC143TS	
Q132	8-729-900-74	TRANSISTOR DTC143TS	
Q202	8-729-900-74	TRANSISTOR DTC143TS	
Q203	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q231	8-729-900-74	TRANSISTOR DTC143TS	
Q232	8-729-900-74	TRANSISTOR DTC143TS	
Q301	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q302	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q303	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q304	8-729-422-57	TRANSISTOR UN4111	
Q305	8-729-900-80	TRANSISTOR DTC114ES	
Q306	8-729-900-80	TRANSISTOR DTC114ES	
Q307	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q308	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q309	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q310	8-729-900-80	TRANSISTOR DTC114ES	
Q311	8-729-195-23	TRANSISTOR 2SA952	
Q312	8-729-900-80	TRANSISTOR DTC114ES	
Q313	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q314	8-729-900-80	TRANSISTOR DTC114ES	
Q316	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q317	8-729-900-80	TRANSISTOR DTC114ES	
Q319	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2	
Q320	8-729-195-23	TRANSISTOR 2SA952	
Q323	8-729-265-52	TRANSISTOR 2SC2655	
Q324	8-729-422-57	TRANSISTOR UN4111	
Q325	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q326	8-729-422-57	TRANSISTOR UN4111	
Q327	8-729-900-80	TRANSISTOR DTC114ES	
Q328	8-729-900-80	TRANSISTOR DTC114ES	
Q329	8-729-194-57	TRANSISTOR 2SC945-P	
Q330	8-729-194-57	TRANSISTOR 2SC945-P	
Q331	8-729-900-80	TRANSISTOR DTC114ES	
Q332	8-729-422-57	TRANSISTOR UN4111	
Q333	8-729-422-57	TRANSISTOR UN4111	
Q334	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q335	8-729-422-57	TRANSISTOR UN4111	
Q398	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q399	8-729-119-78	TRANSISTOR 2SC2785-HFE	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R101	1-249-431-11	CARBON	15K	5%	1/4W
R102	1-249-404-00	CARBON	82	5%	1/4W
R103	1-249-441-11	CARBON	100K	5%	1/4W
R104	1-247-843-11	CARBON	3.3K	5%	1/4W
R110	1-247-807-11	CARBON	100	5%	1/4W
R111	1-247-887-00	CARBON	220K	5%	1/4W
R112	1-249-437-11	CARBON	47K	5%	1/4W
R114	1-249-417-11	CARBON	1K	5%	1/4W
R115	1-249-417-11	CARBON	1K	5%	1/4W
R116	1-249-437-11	CARBON	47K	5%	1/4W
R127	1-249-437-11	CARBON	47K	5%	1/4W
R140	1-249-425-11	CARBON	4.7K	5%	1/4W
R145	1-249-429-11	CARBON	10K	5%	1/4W
R146	1-249-417-11	CARBON	1K	5%	1/4W
R151	1-249-429-11	CARBON	10K	5%	1/4W
R152	1-249-425-11	CARBON	4.7K	5%	1/4W
R153	1-249-417-11	CARBON	1K	5%	1/4W
R155	1-247-887-00	CARBON	220K	5%	1/4W
R156	1-249-425-11	CARBON	4.7K	5%	1/4W
R201	1-249-431-11	CARBON	15K	5%	1/4W
R202	1-249-404-00	CARBON	82	5%	1/4W
R203	1-249-441-11	CARBON	100K	5%	1/4W
R204	1-247-843-11	CARBON	3.3K	5%	1/4W
R210	1-247-807-11	CARBON	100	5%	1/4W
R211	1-247-887-00	CARBON	220K	5%	1/4W
R212	1-249-437-11	CARBON	47K	5%	1/4W
R214	1-249-417-11	CARBON	1K	5%	1/4W
R215	1-249-417-11	CARBON	1K	5%	1/4W
R216	1-249-437-11	CARBON	47K	5%	1/4W
R227	1-249-437-11	CARBON	47K	5%	1/4W
R240	1-249-425-11	CARBON	4.7K	5%	1/4W
R245	1-249-429-11	CARBON	10K	5%	1/4W
R246	1-249-417-11	CARBON	1K	5%	1/4W
R251	1-249-429-11	CARBON	10K	5%	1/4W
R252	1-249-425-11	CARBON	4.7K	5%	1/4W
R253	1-249-417-11	CARBON	1K	5%	1/4W
R255	1-247-887-00	CARBON	220K	5%	1/4W
R256	1-249-425-11	CARBON	4.7K	5%	1/4W
R301	1-247-903-00	CARBON	1M	5%	1/4W
R302	1-249-441-11	CARBON	100K	5%	1/4W
R303	1-249-429-11	CARBON	10K	5%	1/4W
R304	1-249-429-11	CARBON	10K	5%	1/4W
R305	1-249-421-11	CARBON	2.2K	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W
R307	1-247-807-11	CARBON	100	5%	1/4W
R311	1-249-389-11	CARBON	4.7	5%	1/4W
R312	1-249-439-11	CARBON	68K	5%	1/4W
R313	1-249-389-11	CARBON	4.7	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-429-11	CARBON	10K	5%	1/4W
R316	1-249-425-11	CARBON	4.7K	5%	1/4W
R317	1-247-807-11	CARBON	100	5%	1/4W
R318	1-249-435-11	CARBON	33K	5%	1/4W
R319	1-247-895-00	CARBON	470K	5%	1/4W
R320	1-247-903-00	CARBON	1M	5%	1/4W
R323	1-249-425-11	CARBON	4.7K	5%	1/4W
R324	1-249-417-11	CARBON	1K	5%	1/4W
R325	1-249-417-11	CARBON	1K	5%	1/4W
R327	1-249-417-11	CARBON	1K	5%	1/4W
R328	1-249-417-11	CARBON	1K	5%	1/4W
R329	1-249-417-11	CARBON	1K	5%	1/4W
R331	1-247-863-00	CARBON	22K	5%	1/4W
R332	1-249-437-11	CARBON	47K	5%	1/4W
R334	1-249-429-11	CARBON	10K	5%	1/4W
R335	1-249-425-11	CARBON	4.7K	5%	1/4W
R336	1-249-401-11	CARBON	47	5%	1/4W
R337	1-249-437-11	CARBON	47K	5%	1/4W
R338	1-249-417-11	CARBON	1K	5%	1/4W
R339	1-249-417-11	CARBON	1K	5%	1/4W
R340	1-249-417-11	CARBON	1K	5%	1/4W
R342	1-249-425-11	CARBON	4.7K	5%	1/4W
R343	1-249-429-11	CARBON	10K	5%	1/4W
R344	1-249-429-11	CARBON	10K	5%	1/4W
R345	1-249-441-11	CARBON	100K	5%	1/4W
R347	1-249-401-11	CARBON	47	5%	1/4W
R349	1-249-435-11	CARBON	33K	5%	1/4W
R351	1-249-401-11	CARBON	47	5%	1/4W
R352	1-249-428-11	CARBON	8.2K	5%	1/4W
R353	1-249-417-11	CARBON	1K	5%	1/4W
R355	1-247-885-00	CARBON	180K	5%	1/4W
R356	1-249-437-11	CARBON	47K	5%	1/4W
R357	1-249-421-11	CARBON	2.2K	5%	1/4W
R360	1-249-441-11	CARBON	100K	5%	1/4W
R361	1-247-815-00	CARBON	220	5%	1/4W
R362	1-247-807-11	CARBON	100	5%	1/4W
R363	1-249-441-11	CARBON	100K	5%	1/4W
R364	1-249-413-11	CARBON	470	5%	1/4W
R367	1-247-807-11	CARBON	100	5%	1/4W
R368	1-249-413-11	CARBON	470	5%	1/4W
R369	1-247-807-11	CARBON	100	5%	1/4W
R370	1-249-441-11	CARBON	100K	5%	1/4W
R371	1-249-421-11	CARBON	2.2K	5%	1/4W
R376	1-249-421-11	CARBON	2.2K	5%	1/4W
R377	1-249-421-11	CARBON	2.2K	5%	1/4W
R378	1-247-807-11	CARBON	100	5%	1/4W
R379	1-247-815-00	CARBON	220	5%	1/4W
R390	1-249-437-11	CARBON	47K	5%	1/4W
R391	1-249-437-11	CARBON	47K	5%	1/4W
R392	1-249-429-11	CARBON	10K	5%	1/4W
R393	1-249-429-11	CARBON	10K	5%	1/4W
R394	1-249-425-11	CARBON	4.7K	5%	1/4W
R395	1-247-843-11	CARBON	3.3K	5%	1/4W
R396	1-249-413-11	CARBON	470	5%	1/4W
R397	1-247-807-11	CARBON	100	5%	1/4W

AUDIO **CD**

Ref. No.	Part No.	Description			Remark
R398	1-249-429-11	CARBON	10K	5%	1/4W
R399	1-249-429-11	CARBON	10K	5%	1/4W
		< TRANSFORMER >			
T301	1-429-820-11	TRANSFORMER, BIAS OSCILLATION			
**********					
*	A-3321-587-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C702	1-136-165-00	FILM	0.1uF	5%	50V
C703	1-136-165-00	FILM	0.1uF	5%	50V
C704	1-136-165-00	FILM	0.1uF	5%	50V
C705	1-131-375-00	TANTALUM	4.7uF	10%	10V
C706	1-136-159-00	FILM	0.033uF	5%	50V
C707	1-136-156-00	FILM	0.018uF	5%	50V
C708	1-162-199-31	CERAMIC	10PF	5%	50V
C709	1-126-162-11	ELECT	3.3uF	20%	50V
C710	1-136-495-11	FILM	0.068uF	5%	50V
C711	1-162-215-31	CERAMIC	47PF	5%	50V
C712	1-162-306-11	CERAMIC	0.01uF	30%	16V
C713	1-136-159-00	FILM	0.033uF	5%	50V
C714	1-162-306-11	CERAMIC	0.01uF	30%	16V
C715	1-136-159-00	FILM	0.033uF	5%	50V
C716	1-136-165-00	FILM	0.1uF	5%	50V
C717	1-104-664-11	ELECT	47uF	20%	10V
C718	1-126-964-11	ELECT	10uF	20%	50V
C721	1-130-491-00	MYLAR	0.047uF	5%	50V
C722	1-161-494-00	CERAMIC	0.022uF		25V
C723	1-130-495-00	MYLAR	0.1uF	5%	50V
C724	1-128-241-11	ELECT	220uF	20%	10V
C725	1-162-199-31	CERAMIC	10PF	5%	50V
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V
C727	1-162-306-11	CERAMIC	0.01uF	30%	16V
C728	1-162-306-11	CERAMIC	0.01uF	30%	16V
C729	1-124-589-11	ELECT	47uF	20%	16V
C730	1-104-652-11	ELECT	470uF	20%	10V
C731	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C732	1-130-299-00	FILM	0.012uF	5%	50V
C734	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C741	1-124-589-11	ELECT	47uF	20%	16V
C742	1-137-194-00	FILM	0.47uF	5%	50V
C743	1-162-290-31	CERAMIC	470PF	10%	50V
C744	1-162-286-21	CERAMIC	220PF	10%	50V
C745	1-136-169-00	FILM	0.22uF	5%	50V
C746	1-162-306-11	CERAMIC	0.01uF	30%	16V
C747	1-137-370-11	FILM	0.01uF	5%	50V
C750	1-162-306-11	CERAMIC	0.01uF	30%	16V
C751	1-162-306-11	CERAMIC	0.01uF	30%	16V
C752	1-162-201-31	CERAMIC	12PF	5%	50V
C753	1-162-203-31	CERAMIC	15PF	5%	50V

Ref. No.	Part No.	Description			Remark
C754	1-124-589-11	ELECT	47uF	20%	16V
C755	1-162-306-11	CERAMIC	0.01uF	30%	16V
C756	1-162-306-11	CERAMIC	0.01uF	30%	16V
C757	1-162-306-11	CERAMIC	0.01uF	30%	16V
C758	1-162-306-11	CERAMIC	0.01uF	30%	16V
C759	1-162-306-11	CERAMIC	0.01uF	30%	16V
C760	1-162-306-11	CERAMIC	0.01uF	30%	16V
C761	1-162-306-11	CERAMIC	0.01uF	30%	16V
C763	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C764	1-124-259-11	ELECT	4.7uF	20%	16V
C765	1-162-306-11	CERAMIC	0.01uF	30%	16V
C773	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C774	1-124-259-11	ELECT	4.7uF	20%	16V
C782	1-162-294-31	CERAMIC	0.001uF	10%	50V
C787	1-128-241-11	ELECT	220uF	20%	10V
C788	1-162-306-11	CERAMIC	0.01uF	30%	16V
C792	1-162-290-31	CERAMIC	470PF	10%	50V
C793	1-162-290-31	CERAMIC	470PF	10%	50V
C796	1-162-306-11	CERAMIC	0.01uF	30%	16V
C797	1-162-294-31	CERAMIC	0.001uF	10%	50V
C798	1-162-294-31	CERAMIC	0.001uF	10%	50V
C799	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
* CNP701	1-779-466-11	CONNECTOR, FFC/FPC 16P			
* CNP705	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CNP706	1-691-068-21	HOUSING, CONNECTOR 9P			
		< IC >			
IC701	8-752-074-34	IC CXA1782CQ			
IC702	8-752-372-94	IC CXD2507AQ			
IC703	8-759-473-42	IC BA6898FP			
IC704	8-759-426-44	IC 27C512-C35A65-V3.03			
		< COIL >			
L701	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L702	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L752	1-410-324-11	INDUCTOR	4.7uH		
L760	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L770	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
		< TRANSISTOR >			
Q701	8-729-195-23	TRANSISTOR 2SA952			
Q703	8-729-900-74	TRANSISTOR DTC143TS			
		< RESISTOR >			
R700	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-249-440-11	CARBON	82K	5%	1/4W
R702	1-247-896-11	CARBON	510K	5%	1/4W
R703	1-249-441-11	CARBON	100K	5%	1/4W
R704	1-247-883-00	CARBON	150K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-247-876-11	CARBON	75K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R707	1-249-432-11	CARBON	18K	5%	1/4W
R708	1-247-883-00	CARBON	150K	5%	1/4W
R709	1-247-862-11	CARBON	20K	5%	1/4W
R710	1-249-393-11	CARBON	10	5%	1/4W
R714	1-247-883-00	CARBON	150K	5%	1/4W
R715	1-249-430-11	CARBON	12K	5%	1/4W
R716	1-249-430-11	CARBON	12K	5%	1/4W
R717	1-249-429-11	CARBON	10K	5%	1/4W
R718	1-247-899-11	CARBON	680K	5%	1/4W
R720	1-247-891-00	CARBON	330K	5%	1/4W
R722	1-249-439-11	CARBON	68K	5%	1/4W
R723	1-249-440-11	CARBON	82K	5%	1/4W
R725	1-249-437-11	CARBON	47K	5%	1/4W
R726	1-249-429-11	CARBON	10K	5%	1/4W
R727	1-249-429-11	CARBON	10K	5%	1/4W
R730	1-249-435-11	CARBON	33K	5%	1/4W
R731	1-247-863-00	CARBON	22K	5%	1/4W
R734	1-249-437-11	CARBON	47K	5%	1/4W
R735	1-249-429-11	CARBON	10K	5%	1/4W
R736	1-249-417-11	CARBON	1K	5%	1/4W
R740	1-247-843-11	CARBON	3.3K	5%	1/4W
R741	1-249-417-11	CARBON	1K	5%	1/4W
R742	1-249-429-11	CARBON	10K	5%	1/4W
R743	1-247-903-00	CARBON	1M	5%	1/4W
R744	1-247-887-00	CARBON	220K	5%	1/4W
R745	1-249-429-11	CARBON	10K	5%	1/4W
R746	1-249-437-11	CARBON	47K	5%	1/4W
R748	1-249-429-11	CARBON	10K	5%	1/4W
R749	1-249-429-11	CARBON	10K	5%	1/4W
R750	1-249-413-11	CARBON	470	5%	1/4W
R751	1-247-807-11	CARBON	100	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R754	1-249-429-11	CARBON	10K	5%	1/4W
R756	1-249-440-11	CARBON	82K	5%	1/4W
R757	1-249-439-11	CARBON	68K	5%	1/4W
R758	1-249-439-11	CARBON	68K	5%	1/4W
R759	1-249-439-11	CARBON	68K	5%	1/4W
R760	1-249-417-11	CARBON	1K	5%	1/4W
R761	1-249-417-11	CARBON	1K	5%	1/4W
R762	1-249-417-11	CARBON	1K	5%	1/4W
R763	1-249-417-11	CARBON	1K	5%	1/4W
R764	1-249-417-11	CARBON	1K	5%	1/4W
R766	1-249-417-11	CARBON	1K	5%	1/4W
R776	1-249-417-11	CARBON	1K	5%	1/4W
R791	1-247-843-11	CARBON	3.3K	5%	1/4W

< VARIABLE RESISTOR >

RV701	1-241-786-11	RES, ADJ, CARBON 22K
RV702	1-241-786-11	RES, ADJ, CARBON 22K
RV703	1-223-459-21	RES, ADJ, CERMET 2.2K
RV704	1-241-786-11	RES, ADJ, CARBON 22K

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X701	1-767-226-11	VIBRATOR, CRYSTAL (16.9344MHz)			
**********					
*	1-639-678-12	CD MOTOR BOARD			
		**********			
		< CONNECTOR >			
CNP707	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< SWITCH >			
S701	1-572-085-11	SWITCH, LEAF (LIMIT)			
**********					
*	1-671-487-11	H/P BOARD			
		**********			
		< CAPACITOR >			
C154	1-162-294-31	CERAMIC	0.001uF	10%	50V
C254	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< JACK >			
J301	1-566-891-11	JACK (🎧)			
		< COIL >			
L151	1-247-807-31	CARBON	100	5%	1/4W
L251	1-247-807-31	CARBON	100	5%	1/4W
L351	1-414-142-11	INDUCTOR	1uH		
**********					
*	1-662-743-11	HEAD BOARD			
		**********			
**********					
*	1-671-068-11	JACK BOARD			
		**********			
		< CAPACITOR >			
C186	1-162-282-31	CERAMIC	100PF	10%	50V
C286	1-162-282-31	CERAMIC	100PF	10%	50V
C384	1-161-494-00	CERAMIC	0.022uF		25V
C506	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< JACK >			
* J501	1-537-405-11	TERMINAL BOARD (2P SP)			(SPEAKER OUT R-ch)
* J502	1-750-178-31	JACK, PIN 2P (SIGNAL INPUT)			
		< CABLE HOLDER >			
* KH511	1-565-385-11	HOLDER, CABLE 4P			
* KH513	1-573-287-11	HOLDER, CABLE 2P			

JACK **LAMP1** **LAMP2** **LEVEL** **LINE** **OUTLET**

Ref. No.	Part No.	Description			Remark
		< COIL >			
L504	1-420-872-00	COIL, AIR-CORE			
		< RESISTOR >			
R502	1-249-421-11	CARBON	2.2K	5%	1/4W
R503	1-249-421-11	CARBON	2.2K	5%	1/4W
**********					
*	1-671-497-11	LAMP1 BOARD			
		**********			
		< PILOT LAMP >			
PL801	1-517-474-31	LAMP, PILOT			
PL802	1-517-474-31	LAMP, PILOT			
**********					
*	1-671-498-11	LAMP2 BOARD			
		**********			
		< PILOT LAMP >			
PL804	1-517-474-31	LAMP, PILOT			
PL805	1-517-474-31	LAMP, PILOT			
**********					
*	1-671-494-11	LEVEL BOARD			
		**********			
	3-028-254-01	KNOB, VOL			
		< CONNECTOR >			
CNP604	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
		< DIODE >			
D611	8-719-941-07	LED SLC22VR3 (POWER)			
		< VARIABLE RESISTOR >			
RV601	1-238-555-11	RES, VAR, CARBON 50K (LEVEL)			
**********					
*	A-3321-584-A	LINE BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C123	1-162-282-31	CERAMIC	100PF	10%	50V
C125	1-126-964-11	ELECT	10uF	20%	50V
C126	1-126-964-11	ELECT	10uF	20%	50V
C223	1-162-282-31	CERAMIC	100PF	10%	50V
C225	1-126-964-11	ELECT	10uF	20%	50V
C226	1-126-964-11	ELECT	10uF	20%	50V
C318	1-126-963-11	ELECT	4.7uF	20%	50V
C319	1-161-494-00	CERAMIC	0.022uF		25V
C320	1-104-665-11	ELECT	100uF	20%	10V
C321	1-104-664-11	ELECT	47uF	20%	10V

Ref. No.	Part No.	Description			Remark
		< DIODE >			
D321	8-719-991-33	DIODE 1SS133T-77			
D322	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC304	8-759-634-51	IC M5218AP			
J331	8-749-921-12	IC GP1F32T (OPTICAL DIGITAL OUT (CD))			
		< JACK >			
J323	1-566-822-21	JACK (LINE IN)			
J332	1-566-822-21	JACK (LINE OUT)			
		< COIL >			
L111	1-412-503-11	INDUCTOR	22uH		
L131	1-412-503-11	INDUCTOR	22uH		
L211	1-412-503-11	INDUCTOR	22uH		
L231	1-412-503-11	INDUCTOR	22uH		
L301	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L311	1-412-503-11	INDUCTOR	22uH		
L331	1-412-503-11	INDUCTOR	22uH		
		< TRANSISTOR >			
Q101	8-729-900-74	TRANSISTOR DTC143TS			
Q104	8-729-900-74	TRANSISTOR DTC143TS			
Q201	8-729-900-74	TRANSISTOR DTC143TS			
Q204	8-729-900-74	TRANSISTOR DTC143TS			
		< RESISTOR >			
R120	1-249-441-11	CARBON	100K	5%	1/4W
R121	1-249-441-11	CARBON	100K	5%	1/4W
R122	1-247-843-11	CARBON	3.3K	5%	1/4W
R123	1-247-863-00	CARBON	22K	5%	1/4W
R124	1-249-421-11	CARBON	2.2K	5%	1/4W
R125	1-249-421-11	CARBON	2.2K	5%	1/4W
R220	1-249-441-11	CARBON	100K	5%	1/4W
R221	1-249-441-11	CARBON	100K	5%	1/4W
R222	1-247-843-11	CARBON	3.3K	5%	1/4W
R223	1-247-863-00	CARBON	22K	5%	1/4W
R224	1-249-421-11	CARBON	2.2K	5%	1/4W
R225	1-249-421-11	CARBON	2.2K	5%	1/4W
R308	1-249-425-11	CARBON	4.7K	5%	1/4W
R309	1-249-426-11	CARBON	5.6K	5%	1/4W
R321	1-247-807-11	CARBON	100	5%	1/4W
**********					
*	1-671-493-11	OUTLET BOARD			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CONNECTOR >			
CNP606	1-564-321-00	PIN, CONNECTOR 2P			
* CNP607	1-770-314-11	PIN, CONNECTOR 2P			

Ref. No.	Part No.	Description			Remark
CNP608	1-564-321-00	PIN, CONNECTOR 2P			
		< FUSE >			
⚠F601	1-532-501-31	FUSE, TIME-LAG (T0.8AL/250V)			
**********					
*	1-671-064-11	POWER BOARD			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CAPACITOR >			
C501	1-101-005-00	CERAMIC	22000PF		50V
C502	1-136-169-00	FILM	0.22uF	5%	50V
C503	1-136-169-00	FILM	0.22uF	5%	50V
C504	1-101-005-00	CERAMIC	22000PF		50V
C505	1-136-169-00	FILM	0.22uF	5%	50V
		< CONNECTOR >			
CNP501	1-564-321-00	PIN, CONNECTOR 2P			
		< DIODE >			
D501	8-719-902-17	DIODE U15G			
D502	8-719-902-17	DIODE U15G			
D503	8-719-902-17	DIODE U15G			
D504	8-719-902-17	DIODE U15G			
		< FUSE >			
⚠F501	1-532-505-31	FUSE, TIME-LAG (T5AL/250V)			
		< LINE FILTER TRANSFORMER >			
⚠FL501	1-402-663-11	TRANSFORMER, LINE FILTER (LFT)			
		< CABLE HOLDER >			
* KH505	1-573-287-11	HOLDER, CABLE 2P			
		< TRANSFORMER >			
⚠T501	1-433-453-11	TRANSFORMER, POWER (SET)			
**********					
*	1-671-065-11	POWER AMP BOARD			
		**********			
		< CAPACITOR >			
C181	1-126-960-11	ELECT	1uF	20%	50V
C182	1-162-294-31	CERAMIC	0.001uF	10%	50V
C184	1-130-495-00	MYLAR	0.1uF	5%	50V
C185	1-130-495-00	MYLAR	0.1uF	5%	50V
C281	1-126-960-11	ELECT	1uF	20%	50V
C282	1-162-294-31	CERAMIC	0.001uF	10%	50V
C382	1-104-665-11	ELECT	100uF	20%	10V
C385	1-104-664-11	ELECT	47uF	20%	25V
C386	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
		< IC >			
IC309	8-759-333-16	IC LA4705NA			
		< RESISTOR >			
R181	1-249-427-11	CARBON	6.8K	5%	1/4W
R182	1-249-431-11	CARBON	15K	5%	1/4W
⚠R183	1-249-385-11	CARBON	2.2	5%	1/6W F
⚠R184	1-249-385-11	CARBON	2.2	5%	1/6W F
R281	1-249-427-11	CARBON	6.8K	5%	1/4W
R282	1-249-431-11	CARBON	15K	5%	1/4W
R381	1-249-425-11	CARBON	4.7K	5%	1/4W
R383	1-249-417-11	CARBON	1K	5%	1/4W
**********					
*	A-3321-617-A	RDS BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C401	1-124-234-00	ELECT	22uF	20%	16V
C402	1-124-257-00	ELECT	2.2uF	20%	50V
C403	1-124-234-00	ELECT	22uF	20%	16V
C404	1-124-584-00	ELECT	100uF	20%	10V
C405	1-102-516-11	CERAMIC	27PF	5%	50V
C406	1-102-516-11	CERAMIC	27PF	5%	50V
C407	1-162-291-31	CERAMIC	560PF	10%	50V
C408	1-162-288-31	CERAMIC	330PF	10%	50V
C409	1-162-306-11	CERAMIC	0.01uF	30%	16V
C410	1-162-306-11	CERAMIC	0.01uF	30%	16V
C411	1-162-306-11	CERAMIC	0.01uF	30%	16V
C412	1-162-306-11	CERAMIC	0.01uF	30%	16V
C413	1-162-306-11	CERAMIC	0.01uF	30%	16V
C414	1-102-962-00	CERAMIC	30PF	5%	50V
C415	1-102-962-00	CERAMIC	30PF	5%	50V
C416	1-162-306-11	CERAMIC	0.01uF	30%	16V
C417	1-162-306-11	CERAMIC	0.01uF	30%	16V
C418	1-162-306-11	CERAMIC	0.01uF	30%	16V
C419	1-162-306-11	CERAMIC	0.01uF	30%	16V
C422	1-162-306-11	CERAMIC	0.01uF	30%	16V
C431	1-162-306-11	CERAMIC	0.01uF	30%	16V
C434	1-162-282-31	CERAMIC	100PF	10%	50V
C435	1-162-282-31	CERAMIC	100PF	10%	50V
		< CONNECTOR >			
CNP401	1-691-078-41	HOUSING, CONNECTOR 19P			
CNP402	1-691-078-41	HOUSING, CONNECTOR 19P			
		< IC >			
IC401	8-752-899-17	IC CXP83413-047Q			
IC402	8-759-165-81	IC PST600D-T			
IC404	8-759-560-51	IC BU1924F			

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

RDS **RDS. LCD** **REGULATOR** **SW**

Ref. No.	Part No.	Description			Remark
		< COIL >			
L401	1-410-521-11	INDUCTOR	100uH		
L402	1-410-521-11	INDUCTOR	100uH		
L403	1-410-521-11	INDUCTOR	100uH		
L404	1-410-521-11	INDUCTOR	100uH		
L405	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q405	8-729-903-02	TRANSISTOR	DTA143XS		
Q407	8-729-029-66	TRANSISTOR	DTC114ESA		
		< RESISTOR >			
R401	1-249-429-11	CARBON	10K	5%	1/4W
R402	1-249-429-11	CARBON	10K	5%	1/4W
R403	1-249-429-11	CARBON	10K	5%	1/4W
R404	1-249-429-11	CARBON	10K	5%	1/4W
R405	1-249-429-11	CARBON	10K	5%	1/4W
R406	1-249-429-11	CARBON	10K	5%	1/4W
R407	1-249-429-11	CARBON	10K	5%	1/4W
R408	1-249-429-11	CARBON	10K	5%	1/4W
R409	1-249-429-11	CARBON	10K	5%	1/4W
R410	1-249-429-11	CARBON	10K	5%	1/4W
R411	1-249-429-11	CARBON	10K	5%	1/4W
R412	1-249-429-11	CARBON	10K	5%	1/4W
R413	1-249-429-11	CARBON	10K	5%	1/4W
R414	1-249-429-11	CARBON	10K	5%	1/4W
R415	1-249-429-11	CARBON	10K	5%	1/4W
R416	1-249-429-11	CARBON	10K	5%	1/4W
R417	1-249-429-11	CARBON	10K	5%	1/4W
R418	1-249-429-11	CARBON	10K	5%	1/4W
R419	1-249-429-11	CARBON	10K	5%	1/4W
R420	1-249-429-11	CARBON	10K	5%	1/4W
R421	1-249-429-11	CARBON	10K	5%	1/4W
R422	1-249-429-11	CARBON	10K	5%	1/4W
R423	1-249-429-11	CARBON	10K	5%	1/4W
R424	1-249-429-11	CARBON	10K	5%	1/4W
R425	1-249-429-11	CARBON	10K	5%	1/4W
R426	1-249-429-11	CARBON	10K	5%	1/4W
R427	1-249-429-11	CARBON	10K	5%	1/4W
R428	1-249-429-11	CARBON	10K	5%	1/4W
R429	1-249-429-11	CARBON	10K	5%	1/4W
R430	1-249-429-11	CARBON	10K	5%	1/4W
R431	1-249-429-11	CARBON	10K	5%	1/4W
R432	1-249-429-11	CARBON	10K	5%	1/4W
R433	1-249-429-11	CARBON	10K	5%	1/4W
R434	1-249-429-11	CARBON	10K	5%	1/4W
R435	1-249-429-11	CARBON	10K	5%	1/4W
R436	1-249-429-11	CARBON	10K	5%	1/4W
R437	1-249-429-11	CARBON	10K	5%	1/4W
R438	1-249-429-11	CARBON	10K	5%	1/4W
R439	1-249-429-11	CARBON	10K	5%	1/4W
R440	1-249-432-11	CARBON	18K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R441	1-249-417-11	CARBON	1K	5%	1/4W
R442	1-249-417-11	CARBON	1K	5%	1/4W
R443	1-249-417-11	CARBON	1K	5%	1/4W
R449	1-249-429-11	CARBON	10K	5%	1/4W
R451	1-249-428-11	CARBON	8.2K	5%	1/4W
R453	1-247-807-11	CARBON	100	5%	1/4W
R454	1-247-807-11	CARBON	100	5%	1/4W
R479	1-249-421-11	CARBON	2.2K	5%	1/4W
		< VIBRATOR >			
X402	1-579-825-11	VIBRATOR, CERAMIC (2.62MHz)			
X403	1-760-556-11	VIBRATOR, CRYSTAL (4.332MHz)			
**********					
*	1-671-496-11	RDS.LCD BOARD			
		**********			
	1-783-983-11	WIRE, PARALLEL (19 CORE)			
	3-028-490-01	ILLUMINATOR (RDS)			
	3-028-492-01	HOLDER (RDS), LCD			
	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S			
		< CONNECTOR >			
CNP403	1-691-051-21	HOUSING, CONNECTOR 19P			
CNP404	1-691-051-21	HOUSING, CONNECTOR 19P			
		< LIQUID CRYSTAL DISPLAY >			
LCD401	1-803-161-11	DISPLAY PANEL, LIQUID CRYSTAL (RDS)			
**********					
*	1-672-059-11	REGULATOR BOARD			
		**********			
		< CAPACITOR >			
C391	1-162-306-11	CERAMIC	0.01uF	30%	16V
C392	1-162-306-11	CERAMIC	0.01uF	30%	16V
C393	1-162-306-11	CERAMIC	0.01uF	30%	16V
C394	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CNP312	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P			
		< TRANSISTOR >			
Q315	8-729-209-15	TRANSISTOR	2SD2012		
Q318	8-729-209-15	TRANSISTOR	2SD2012		
**********					
*	1-662-742-11	SW BOARD			
		**********			
		< CONNECTOR >			
* CN691	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P			

Ref. No.	Part No.	Description			Remark
		< PHOTO REFLECTOR >			
PH691	1-801-455-11	PHOTO REFLECTOR			
		< RESISTOR >			
R691	1-247-827-11	CARBON	680	5%	1/4W
		< SWITCH >			
S691	1-762-811-11	SWITCH, LEAF (HALF (CASSETTE))			
S694	1-762-811-11	SWITCH, LEAF (REC-REV (ERASE PROOF))			
S695	1-762-811-11	SWITCH, LEAF (REC-FWD (ERASE PROOF))			
S696	1-762-810-11	SWITCH, LEAF (MODE (HEAD POSITION))			
**********					
*	1-671-485-11	SW1 BOARD **********			
		< CAPACITOR >			
C902	1-162-282-31	CERAMIC	100PF	10%	50V
C903	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
CNP901	1-770-398-11	HOUSING, CONNECTOR (PC BOARD) 5P			
CNP902	1-770-396-11	HOUSING, CONNECTOR (PC BOARD) 3P			
		< IC >			
IC901	8-759-471-49	IC NJL57H400			
		< RESISTOR >			
R950	1-249-415-11	CARBON	680	5%	1/4W
R951	1-249-416-11	CARBON	820	5%	1/4W
R952	1-249-418-11	CARBON	1.2K	5%	1/4W
R953	1-249-420-11	CARBON	1.8K	5%	1/4W
R954	1-247-843-11	CARBON	3.3K	5%	1/4W
R955	1-249-427-11	CARBON	6.8K	5%	1/4W
R956	1-249-415-11	CARBON	680	5%	1/4W
R957	1-249-416-11	CARBON	820	5%	1/4W
R958	1-249-418-11	CARBON	1.2K	5%	1/4W
R959	1-249-420-11	CARBON	1.8K	5%	1/4W
R960	1-247-843-11	CARBON	3.3K	5%	1/4W
R961	1-249-427-11	CARBON	6.8K	5%	1/4W
R962	1-249-415-11	CARBON	680	5%	1/4W
R963	1-249-416-11	CARBON	820	5%	1/4W
R964	1-249-418-11	CARBON	1.2K	5%	1/4W
R965	1-249-420-11	CARBON	1.8K	5%	1/4W
R966	1-247-843-11	CARBON	3.3K	5%	1/4W
R967	1-249-427-11	CARBON	6.8K	5%	1/4W
		< SWITCH >			
S901	1-692-014-11	SWITCH, KEY BOARD (▶▶)			
S902	1-692-014-11	SWITCH, KEY BOARD (◀◀)			
S903	1-692-014-11	SWITCH, KEY BOARD (► (TAPE))			
S904	1-692-014-11	SWITCH, KEY BOARD (■ (TAPE))			

Ref. No.	Part No.	Description			Remark
S905	1-692-014-11	SWITCH, KEY BOARD (◄ (TAPE))			
S906	1-692-014-11	SWITCH, KEY BOARD (● / ❚❚)			
S907	1-692-014-11	SWITCH, KEY BOARD (DIR MODE)			
S908	1-692-014-11	SWITCH, KEY BOARD (■ (CD))			
S909	1-692-014-11	SWITCH, KEY BOARD (❚❚ (CD))			
S910	1-692-014-11	SWITCH, KEY BOARD (► (CD))			
S911	1-692-014-11	SWITCH, KEY BOARD (FUNCTION)			
S912	1-692-014-11	SWITCH, KEY BOARD (OPERATE)			
S913	1-692-014-11	SWITCH, KEY BOARD (DISPLAY ENTER/MEM)			
S914	1-692-014-11	SWITCH, KEY BOARD (VOLUME +)			
S915	1-692-014-11	SWITCH, KEY BOARD (VOLUME –)			
S916	1-692-014-11	SWITCH, KEY BOARD (▶▶I, TUNE +)			
S917	1-692-014-11	SWITCH, KEY BOARD (I◀◀, TUNE –)			
S918	1-692-014-11	SWITCH, KEY BOARD (BAND (RADIO))			
S919	1-692-014-11	SWITCH, KEY BOARD (PRESET + (RADIO))			
S920	1-692-014-11	SWITCH, KEY BOARD (PRESET – (RADIO))			
**********					
*	1-671-486-11	SW2 BOARD **********			
		< RESISTOR >			
R970	1-249-415-11	CARBON	680	5%	1/4W
R971	1-249-416-11	CARBON	820	5%	1/4W
		< SWITCH >			
S921	1-692-014-11	SWITCH, KEY BOARD (SOUND)			
S922	1-692-014-11	SWITCH, KEY BOARD (PGM SET AUTO PRESET)			
S923	1-692-014-11	SWITCH, KEY BOARD (PLAY MODE MONO/ST ISS)			
**********					
*	A-3321-588-A	SYSTEM BOARD, COMPLETE **********			
	3-028-260-01	HOLDER, LCD			
	3-028-491-01	ILLUMINATOR			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 N-S			
		< CAPACITOR >			
C801	1-124-261-00	ELECT	10uF	20%	50V
C802	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C803	1-124-589-11	ELECT	47uF	20%	16V
C804	1-162-306-11	CERAMIC	0.01uF	30%	16V
C805	1-124-584-00	ELECT	100uF	20%	10V
C806	1-162-306-11	CERAMIC	0.01uF	30%	16V
C807	1-102-516-11	CERAMIC	27PF	5%	50V
C808	1-102-516-11	CERAMIC	27PF	5%	50V
C809	1-161-494-00	CERAMIC	0.022uF		25V
C810	1-124-261-00	ELECT	10uF	20%	50V
C811	1-104-664-11	ELECT	47uF	20%	10V
C813	1-162-306-11	CERAMIC	0.01uF	30%	16V
C814	1-162-306-11	CERAMIC	0.01uF	30%	16V
C815	1-162-306-11	CERAMIC	0.01uF	30%	16V
C816	1-162-306-11	CERAMIC	0.01uF	30%	16V

SYSTEM

Ref. No.	Part No.	Description			Remark
C817	1-102-518-11	CERAMIC	33PF	5%	50V
C818	1-102-516-11	CERAMIC	27PF	5%	50V
C819	1-102-516-11	CERAMIC	27PF	5%	50V
C820	1-102-518-11	CERAMIC	33PF	5%	50V
C821	1-162-306-11	CERAMIC	0.01uF	30%	16V
C822	1-162-306-11	CERAMIC	0.01uF	30%	16V
C823	1-162-282-31	CERAMIC	100PF	10%	50V
C824	1-162-282-31	CERAMIC	100PF	10%	50V
C825	1-162-282-31	CERAMIC	100PF	10%	50V
C826	1-162-282-31	CERAMIC	100PF	10%	50V
C827	1-162-282-31	CERAMIC	100PF	10%	50V
C829	1-162-282-31	CERAMIC	100PF	10%	50V
C830	1-162-282-31	CERAMIC	100PF	10%	50V
C831	1-162-282-31	CERAMIC	100PF	10%	50V
C832	1-162-282-31	CERAMIC	100PF	10%	50V
C833	1-162-282-31	CERAMIC	100PF	10%	50V
C834	1-162-282-31	CERAMIC	100PF	10%	50V
C835	1-162-282-31	CERAMIC	100PF	10%	50V
C836	1-162-282-31	CERAMIC	100PF	10%	50V
C837	1-162-282-31	CERAMIC	100PF	10%	50V
C838	1-162-282-31	CERAMIC	100PF	10%	50V
C839	1-162-306-11	CERAMIC	0.01uF	30%	16V
C841	1-162-306-11	CERAMIC	0.01uF	30%	16V
C842	1-162-306-11	CERAMIC	0.01uF	30%	16V
C843	1-162-306-11	CERAMIC	0.01uF	30%	16V
C844	1-162-306-11	CERAMIC	0.01uF	30%	16V
C845	1-162-282-31	CERAMIC	100PF	10%	50V
C846	1-162-306-11	CERAMIC	0.01uF	30%	16V
C847	1-162-306-11	CERAMIC	0.01uF	30%	16V
C848	1-162-306-11	CERAMIC	0.01uF	30%	16V
C849	1-162-282-31	CERAMIC	100PF	10%	50V
C850	1-162-282-31	CERAMIC	100PF	10%	50V
C851	1-162-282-31	CERAMIC	100PF	10%	50V
C852	1-162-306-11	CERAMIC	0.01uF	30%	16V
C853	1-162-282-31	CERAMIC	100PF	10%	50V
C854	1-162-282-31	CERAMIC	100PF	10%	50V
C855	1-162-282-31	CERAMIC	100PF	10%	50V
C856	1-162-282-31	CERAMIC	100PF	10%	50V
C857	1-162-306-11	CERAMIC	0.01uF	30%	16V
C858	1-124-261-00	ELECT	10uF	20%	50V
C859	1-162-306-11	CERAMIC	0.01uF	30%	16V
C860	1-162-306-11	CERAMIC	0.01uF	30%	16V
C861	1-162-306-11	CERAMIC	0.01uF	30%	16V
C863	1-162-306-11	CERAMIC	0.01uF	30%	16V
C866	1-126-964-11	ELECT	10uF	20%	50V
C867	1-162-306-11	CERAMIC	0.01uF	30%	16V
C868	1-162-306-11	CERAMIC	0.01uF	30%	16V
C869	1-162-306-11	CERAMIC	0.01uF	30%	16V
C901	1-104-664-11	ELECT	47uF	20%	10V
		< CONNECTOR >			
CNP801	1-774-493-11	CONNECTOR, FFC/FPC 27P			
CNP802	1-770-389-11	PIN, CONNECTOR (PC BOARD) 5P			
CNP803	1-770-387-11	PIN, CONNECTOR (PC BOARD) 3P			
* CNP804	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CNP805	1-568-852-11	CONNECTOR, FFC/FPC 9P			
* CNP806	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CNP808	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< DIODE >			
D801	8-719-991-33	DIODE 1SS133T-77			
D802	8-719-991-33	DIODE 1SS133T-77			
D803	8-719-991-33	DIODE 1SS133T-77			
D804	8-719-991-33	DIODE 1SS133T-77			
D805	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC801	8-752-899-66	IC CXP83120A-022Q			
IC802	8-759-553-50	IC S-81256PG-Z			
IC803	8-759-511-42	IC S-80730AN			
		< COIL >			
L801	1-408-117-00	INDUCTOR	10uH		
L802	1-412-832-11	INDUCTOR	1uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-803-162-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q801	8-729-194-57	TRANSISTOR 2SC945-P			
Q802	8-729-922-66	TRANSISTOR 2SC2410SN			
Q803	8-729-922-66	TRANSISTOR 2SC2410SN			
Q804	8-729-900-80	TRANSISTOR DTC114ES			
Q805	8-729-801-84	TRANSISTOR 2SB1013-4			
		< RESISTOR >			
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-417-11	CARBON	1K	5%	1/4W
R803	1-249-417-11	CARBON	1K	5%	1/4W
R804	1-249-417-11	CARBON	1K	5%	1/4W
R805	1-249-417-11	CARBON	1K	5%	1/4W
R806	1-249-417-11	CARBON	1K	5%	1/4W
R807	1-249-429-11	CARBON	10K	5%	1/4W
R808	1-249-417-11	CARBON	1K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R810	1-249-417-11	CARBON	1K	5%	1/4W
R811	1-249-417-11	CARBON	1K	5%	1/4W
R812	1-249-429-11	CARBON	10K	5%	1/4W
R813	1-249-429-11	CARBON	10K	5%	1/4W
R814	1-249-429-11	CARBON	10K	5%	1/4W
R815	1-249-417-11	CARBON	1K	5%	1/4W
R816	1-249-429-11	CARBON	10K	5%	1/4W
R818	1-249-417-11	CARBON	1K	5%	1/4W
R819	1-249-417-11	CARBON	1K	5%	1/4W
R820	1-249-417-11	CARBON	1K	5%	1/4W
R821	1-249-417-11	CARBON	1K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R822	1-249-429-11	CARBON	10K	5%	1/4W
R823	1-249-429-11	CARBON	10K	5%	1/4W
R824	1-249-417-11	CARBON	1K	5%	1/4W
R825	1-249-417-11	CARBON	1K	5%	1/4W
R826	1-249-413-11	CARBON	470	5%	1/4W
R827	1-249-413-11	CARBON	470	5%	1/4W
R828	1-249-417-11	CARBON	1K	5%	1/4W
R829	1-249-417-11	CARBON	1K	5%	1/4W
R830	1-249-429-11	CARBON	10K	5%	1/4W
R831	1-249-429-11	CARBON	10K	5%	1/4W
R832	1-249-425-11	CARBON	4.7K	5%	1/4W
R833	1-249-425-11	CARBON	4.7K	5%	1/4W
R834	1-249-429-11	CARBON	10K	5%	1/4W
R835	1-249-429-11	CARBON	10K	5%	1/4W
R836	1-249-429-11	CARBON	10K	5%	1/4W
R837	1-249-417-11	CARBON	1K	5%	1/4W
R841	1-249-429-11	CARBON	10K	5%	1/4W
R842	1-249-429-11	CARBON	10K	5%	1/4W
R843	1-249-429-11	CARBON	10K	5%	1/4W
R844	1-249-432-11	CARBON	18K	5%	1/4W
R845	1-249-411-11	CARBON	330	5%	1/4W
R846	1-249-429-11	CARBON	10K	5%	1/4W
R847	1-249-417-11	CARBON	1K	5%	1/4W
R848	1-249-417-11	CARBON	1K	5%	1/4W
R849	1-249-417-11	CARBON	1K	5%	1/4W
R850	1-249-417-11	CARBON	1K	5%	1/4W
R851	1-249-417-11	CARBON	1K	5%	1/4W
R852	1-249-417-11	CARBON	1K	5%	1/4W
R853	1-249-417-11	CARBON	1K	5%	1/4W
R854	1-249-437-11	CARBON	47K	5%	1/4W
R855	1-249-417-11	CARBON	1K	5%	1/4W
R856	1-249-425-11	CARBON	4.7K	5%	1/4W
R857	1-249-425-11	CARBON	4.7K	5%	1/4W
R858	1-249-425-11	CARBON	4.7K	5%	1/4W
R859	1-249-425-11	CARBON	4.7K	5%	1/4W
R866	1-249-441-11	CARBON	100K	5%	1/4W
R867	1-249-417-11	CARBON	1K	5%	1/4W
R868	1-249-441-11	CARBON	100K	5%	1/4W
R869	1-249-428-11	CARBON	8.2K	5%	1/4W
R872	1-249-429-11	CARBON	10K	5%	1/4W
R873	1-249-437-11	CARBON	47K	5%	1/4W
R877	1-249-437-11	CARBON	47K	5%	1/4W
R880	1-249-437-11	CARBON	47K	5%	1/4W
R881	1-249-437-11	CARBON	47K	5%	1/4W
R882	1-249-425-11	CARBON	4.7K	5%	1/4W
R898	1-249-387-11	CARBON	3.3	5%	1/4W
R899	1-249-387-11	CARBON	3.3	5%	1/4W
R900	1-249-417-11	CARBON	1K	5%	1/4W
R901	1-249-417-11	CARBON	1K	5%	1/4W
R902	1-249-417-11	CARBON	1K	5%	1/4W
R903	1-249-417-11	CARBON	1K	5%	1/4W
R904	1-249-417-11	CARBON	1K	5%	1/4W
R905	1-249-417-11	CARBON	1K	5%	1/4W
R906	1-249-417-11	CARBON	1K	5%	1/4W
R907	1-249-417-11	CARBON	1K	5%	1/4W
R908	1-249-417-11	CARBON	1K	5%	1/4W
R909	1-249-417-11	CARBON	1K	5%	1/4W
R910	1-249-417-11	CARBON	1K	5%	1/4W
R911	1-249-417-11	CARBON	1K	5%	1/4W
R912	1-249-417-11	CARBON	1K	5%	1/4W
R913	1-249-417-11	CARBON	1K	5%	1/4W
R914	1-249-417-11	CARBON	1K	5%	1/4W
R915	1-249-417-11	CARBON	1K	5%	1/4W
R916	1-249-417-11	CARBON	1K	5%	1/4W
R917	1-249-417-11	CARBON	1K	5%	1/4W
R918	1-249-417-11	CARBON	1K	5%	1/4W
R919	1-249-417-11	CARBON	1K	5%	1/4W
R920	1-249-417-11	CARBON	1K	5%	1/4W
R921	1-249-417-11	CARBON	1K	5%	1/4W
R922	1-249-417-11	CARBON	1K	5%	1/4W
R923	1-249-417-11	CARBON	1K	5%	1/4W
R924	1-249-417-11	CARBON	1K	5%	1/4W
R925	1-249-417-11	CARBON	1K	5%	1/4W
R926	1-249-417-11	CARBON	1K	5%	1/4W
R927	1-249-417-11	CARBON	1K	5%	1/4W

< VIBRATOR >

X801	1-760-105-11	VIBRATOR, CRYSTAL (32.768kHz)			
X802	1-767-184-11	VIBRATOR, CERAMIC (4.19MHz)			

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*	1-671-066-11	TERMINAL BOARD			

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< CAPACITOR >

C284	1-130-495-00	MYLAR	0.1uF	5%	50V
C285	1-130-495-00	MYLAR	0.1uF	5%	50V
C381	1-126-946-11	ELECT	6800uF	20%	25V

< CONNECTOR >

* CNP503	1-506-946-11	PIN, CONNECTOR 4P			
* CNP504	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CNP505	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			

< CABLE HOLDER >

* KH510	1-565-385-11	HOLDER, CABLE 4P			
* KH512	1-573-287-11	HOLDER, CABLE 2P			

< FERRITE BEAD >

L501	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		

< RESISTOR >

⚠R283	1-249-385-11	CARBON	2.2	5%	1/6W F
⚠R284	1-249-385-11	CARBON	2.2	5%	1/6W F

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The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

TUNER

Ref. No.	Part No.	Description			Remark
*	A-3321-585-A	TUNER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-162-306-11	CERAMIC	0.01uF	30%	16V
C2	1-162-294-31	CERAMIC	0.001uF	10%	50V
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V
C4	1-130-483-00	MYLAR	0.01uF	5%	50V
C6	1-162-306-11	CERAMIC	0.01uF	30%	16V
C7	1-162-282-31	CERAMIC	100PF	10%	50V
C8	1-162-306-11	CERAMIC	0.01uF	30%	16V
C9	1-162-306-11	CERAMIC	0.01uF	30%	16V
C10	1-162-306-11	CERAMIC	0.01uF	30%	16V
C11	1-104-665-11	ELECT	100uF	20%	10V
C12	1-126-963-11	ELECT	4.7uF	20%	50V
C13	1-162-215-31	CERAMIC	47PF	5%	50V
C15	1-162-306-11	CERAMIC	0.01uF	30%	16V
C16	1-162-306-11	CERAMIC	0.01uF	30%	16V
C17	1-162-306-11	CERAMIC	0.01uF	30%	16V
C18	1-161-057-00	CERAMIC	0.033uF	10%	50V
C19	1-161-057-00	CERAMIC	0.033uF	10%	50V
C20	1-126-964-11	ELECT	10uF	20%	50V
C21	1-126-964-11	ELECT	10uF	20%	50V
C22	1-162-850-11	CERAMIC	0.082uF	10%	16V
C23	1-162-849-11	CERAMIC	0.068uF	10%	16V
C24	1-162-850-11	CERAMIC	0.082uF	10%	16V
C25	1-126-964-11	ELECT	10uF	20%	50V
C26	1-162-288-31	CERAMIC	330PF	10%	50V
C29	1-162-286-21	CERAMIC	220PF	10%	50V
C30	1-162-290-31	CERAMIC	470PF	10%	50V
C31	1-136-177-00	FILM	1uF	5%	50V
C32	1-162-294-31	CERAMIC	0.001uF	10%	50V
C33	1-161-494-00	CERAMIC	0.022uF		25V
C40	1-102-518-11	CERAMIC	33PF	5%	50V
C41	1-162-203-31	CERAMIC	15PF	5%	50V
C42	1-162-306-11	CERAMIC	0.01uF	30%	16V
C43	1-162-282-31	CERAMIC	100PF	10%	50V
C44	1-162-306-11	CERAMIC	0.01uF	30%	16V
C45	1-162-306-11	CERAMIC	0.01uF	30%	16V
C46	1-162-306-11	CERAMIC	0.01uF	30%	16V
C47	1-162-306-11	CERAMIC	0.01uF	30%	16V
C48	1-162-294-31	CERAMIC	0.001uF	10%	50V
C49	1-162-294-31	CERAMIC	0.001uF	10%	50V
C50	1-162-294-31	CERAMIC	0.001uF	10%	50V
C51	1-162-306-11	CERAMIC	0.01uF	30%	16V
C52	1-126-964-11	ELECT	10uF	20%	50V
C53	1-162-306-11	CERAMIC	0.01uF	30%	16V
C54	1-126-964-11	ELECT	10uF	20%	50V
C55	1-136-177-00	FILM	1uF	5%	50V
C56	1-162-306-11	CERAMIC	0.01uF	30%	16V
C60	1-161-772-11	CERAMIC	0.1uF	10%	25V
C61	1-162-291-31	CERAMIC	560PF	10%	50V
C62	1-162-207-31	CERAMIC	22PF	5%	50V
C63	1-161-772-11	CERAMIC	0.1uF	10%	25V
C64	1-162-306-11	CERAMIC	0.01uF	30%	16V
C65	1-162-306-11	CERAMIC	0.01uF	30%	16V
C66	1-130-495-00	MYLAR	0.1uF	5%	50V
C69	1-161-494-00	CERAMIC	0.022uF		25V
C70	1-136-356-11	FILM	470PF	5%	63V
C72	1-162-282-31	CERAMIC	100PF	10%	50V
C73	1-162-306-11	CERAMIC	0.01uF	30%	16V
C74	1-162-306-11	CERAMIC	0.01uF	30%	16V
C75	1-162-281-31	CERAMIC	91PF	10%	50V
C76	1-162-306-11	CERAMIC	0.01uF	30%	16V
C83	1-162-288-31	CERAMIC	330PF	10%	50V
C84	1-162-306-11	CERAMIC	0.01uF	30%	16V
C85	1-124-907-11	ELECT	10uF	20%	50V
C86	1-162-294-31	CERAMIC	0.001uF	10%	50V
C87	1-162-306-11	CERAMIC	0.01uF	30%	16V
C88	1-162-306-11	CERAMIC	0.01uF	30%	16V
C89	1-126-964-11	ELECT	10uF	20%	50V
C90	1-162-282-31	CERAMIC	100PF	10%	50V
C91	1-162-282-31	CERAMIC	100PF	10%	50V
C93	1-162-306-11	CERAMIC	0.01uF	30%	16V
C95	1-162-282-31	CERAMIC	100PF	10%	50V
C96	1-162-294-31	CERAMIC	0.001uF	10%	50V
C99	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< FILTER >			
CF1	1-760-468-11	FILTER, CERAMIC			
CF2	1-760-468-11	FILTER, CERAMIC			
CF3	1-760-468-11	FILTER, CERAMIC			
CF4	1-767-096-11	VIBRATOR, CERAMIC			
		< ENCAPSULATED COMPONENT >			
CFT1	1-239-173-11	ENCAPSULATED COMPONENT			
		< CONNECTOR >			
CNP1	1-778-310-11	PLUG, CONNECTOR 2P			
CNP2	1-779-535-11	CONNECTOR, COAXIAL (EXT ANT FM)			
* CNP3	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CNP4	1-573-844-11	CONNECTOR, BOARD TO BOARD 12P			
		< TRIMMER >			
CT4	1-141-410-11	CAP, ADJ	10PF		
CT5	1-141-439-21	CAP, ADJ	50PF		
		< DIODE >			
D5	8-719-976-30	DIODE KV1560N			
D90	8-719-991-33	DIODE 1SS133T-77			
D91	8-719-991-33	DIODE 1SS133T-77			
D92	8-719-991-33	DIODE 1SS133T-77			
D93	8-719-991-33	DIODE 1SS133T-77			
D94	8-719-991-33	DIODE 1SS133T-77			
D95	8-719-991-33	DIODE 1SS133T-77			
D96	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description			Remark
D97	8-719-991-33	DIODE 1SS133T-77			
D98	8-719-991-33	DIODE 1SS133T-77			
D99	8-719-991-33	DIODE 1SS133T-77			
		< BAND PASS FILTER >			
FL1	1-236-711-21	FILTER, BAND PASS			
		< IC >			
IC1	8-759-386-02	IC TA2008AN			
IC2	8-759-290-61	IC BU2615S			
		< COIL >			
L3	1-416-248-11	COIL, MW RF			
L4	1-416-247-11	COIL (OSC)			
L5	1-416-249-11	COIL, LW RF			
L6	1-412-514-11	INDUCTOR	220uH		
L40	1-412-514-11	INDUCTOR	220uH		
		< CONNECTOR >			
* P1	1-564-187-00	PIN, CONNECTOR			
		< TRANSISTOR >			
Q1	8-729-905-50	TRANSISTOR DTC343TS			
Q2	8-729-905-50	TRANSISTOR DTC343TS			
Q3	8-729-922-66	TRANSISTOR 2SC2410SN			
Q4	8-729-922-66	TRANSISTOR 2SC2410SN			
Q5	8-729-178-62	TRANSISTOR 2SC2786-L			
Q6	8-729-119-32	FET 2SK193			
Q7	8-729-922-66	TRANSISTOR 2SC2410SN			
Q8	8-729-904-39	TRANSISTOR DTC114TS			
Q9	8-729-115-80	TRANSISTOR BA1A4P			
Q10	8-729-115-80	TRANSISTOR BA1A4P			
Q11	8-729-115-80	TRANSISTOR BA1A4P			
Q12	8-729-115-80	TRANSISTOR BA1A4P			
Q13	8-729-012-83	FET 2SK679A			
Q17	8-729-029-23	TRANSISTOR DTA114TSA-TP			
Q21	8-729-422-57	TRANSISTOR BA1A4M			
Q22	8-729-422-57	TRANSISTOR BA1A4M			
Q24	8-729-422-57	TRANSISTOR BA1A4M			
Q25	8-729-029-68	TRANSISTOR DTC114TSA			
Q26	8-729-029-66	TRANSISTOR DTC114ESA			
Q27	8-729-029-55	TRANSISTOR DTA143ZSA			
Q28	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q30	8-729-115-80	TRANSISTOR BA1A4P			
Q31	8-729-422-57	TRANSISTOR BA1A4M			
Q32	8-729-115-80	TRANSISTOR BA1A4P			
Q33	8-729-115-80	TRANSISTOR BA1A4P			
		< RESISTOR >			
R1	1-249-417-11	CARBON	1K	5%	1/4W
R2	1-249-411-11	CARBON	330	5%	1/4W
R3	1-247-791-00	CARBON	22	5%	1/4W
R10	1-249-403-11	CARBON	68	5%	1/4W

Ref. No.	Part No.	Description			Remark
R11	1-249-425-11	CARBON	4.7K	5%	1/4W
R13	1-249-407-11	CARBON	150	5%	1/4W
R14	1-249-437-11	CARBON	47K	5%	1/4W
R15	1-249-399-11	CARBON	33	5%	1/4W
R16	1-249-411-11	CARBON	330	5%	1/4W
R17	1-249-421-11	CARBON	2.2K	5%	1/4W
R18	1-249-393-11	CARBON	10	5%	1/4W
R19	1-247-863-00	CARBON	22K	5%	1/4W
R21	1-247-863-00	CARBON	22K	5%	1/4W
R22	1-249-421-11	CARBON	2.2K	5%	1/4W
R23	1-249-421-11	CARBON	2.2K	5%	1/4W
R25	1-249-425-11	CARBON	4.7K	5%	1/4W
R26	1-249-425-11	CARBON	4.7K	5%	1/4W
R27	1-249-425-11	CARBON	4.7K	5%	1/4W
R28	1-249-425-11	CARBON	4.7K	5%	1/4W
R29	1-249-417-11	CARBON	1K	5%	1/4W
R30	1-249-441-11	CARBON	100K	5%	1/4W
R40	1-249-429-11	CARBON	10K	5%	1/4W
R41	1-249-429-11	CARBON	10K	5%	1/4W
R42	1-249-429-11	CARBON	10K	5%	1/4W
R43	1-249-429-11	CARBON	10K	5%	1/4W
R44	1-249-417-11	CARBON	1K	5%	1/4W
R45	1-249-417-11	CARBON	1K	5%	1/4W
R46	1-249-417-11	CARBON	1K	5%	1/4W
R47	1-249-417-11	CARBON	1K	5%	1/4W
R49	1-249-412-11	CARBON	390	5%	1/4W
R50	1-249-415-11	CARBON	680	5%	1/4W
R51	1-249-417-11	CARBON	1K	5%	1/4W
R52	1-249-427-11	CARBON	6.8K	5%	1/4W
R53	1-247-863-00	CARBON	22K	5%	1/4W
R54	1-249-417-11	CARBON	1K	5%	1/4W
R55	1-249-437-11	CARBON	47K	5%	1/4W
R56	1-249-437-11	CARBON	47K	5%	1/4W
R57	1-249-437-11	CARBON	47K	5%	1/4W
R59	1-247-843-11	CARBON	3.3K	5%	1/4W
R60	1-249-429-11	CARBON	10K	5%	1/4W
R61	1-249-425-11	CARBON	4.7K	5%	1/4W
R62	1-249-425-11	CARBON	4.7K	5%	1/4W
R63	1-249-441-11	CARBON	100K	5%	1/4W
R64	1-247-887-00	CARBON	220K	5%	1/4W
R65	1-249-411-11	CARBON	330	5%	1/4W
R66	1-249-413-11	CARBON	470	5%	1/4W
R67	1-249-429-11	CARBON	10K	5%	1/4W
R70	1-249-425-11	CARBON	4.7K	5%	1/4W
R71	1-249-425-11	CARBON	4.7K	5%	1/4W
R72	1-249-425-11	CARBON	4.7K	5%	1/4W
R73	1-247-887-00	CARBON	220K	5%	1/4W
R74	1-249-416-11	CARBON	820	5%	1/4W
R75	1-247-887-00	CARBON	220K	5%	1/4W
R76	1-249-441-11	CARBON	100K	5%	1/4W
R77	1-247-887-00	CARBON	220K	5%	1/4W
R78	1-249-417-11	CARBON	1K	5%	1/4W
R79	1-249-429-11	CARBON	10K	5%	1/4W

TUNER S/WOOFER AMP

Ref. No.	Part No.	Description			Remark
R81	1-249-417-11	CARBON	1K	5%	1/4W
		< ENCAPSULATED COMPONENT >			
T1	1-233-306-31	ENCAPSULATED COMPONENT			
		< TUNER >			
* TU1	1-693-378-11	TUNER UNIT			
		< VIBRATOR >			
X1	1-760-130-11	VIBRATOR, CRYSTAL (75kHz)			
**********					
*	A-3321-676-A	S/WOOFER AMP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C601	1-136-165-00	MYLAR	0.1uF	5%	50V
C604	1-126-933-11	ELECT	100uF	20%	16V
C605	1-126-964-11	ELECT	10uF	20%	50V
C606	1-126-963-11	ELECT	4.7uF	20%	50V
C607	1-126-960-11	ELECT	1uF	20%	50V
C608	1-136-495-11	FILM	0.068uF	5%	50V
C609	1-126-942-61	ELECT	1000uF	20%	25V
C610	1-136-495-11	FILM	0.068uF	5%	50V
C611	1-137-194-00	FILM	0.47uF	5%	50V
C612	1-126-964-11	ELECT	10uF	20%	50V
C613	1-126-960-11	ELECT	1uF	20%	50V
C614	1-126-963-11	ELECT	4.7uF	20%	50V
C615	1-126-963-11	ELECT	4.7uF	20%	50V
C616	1-128-551-11	ELECT	22uF	20%	25V
C617	1-126-960-11	ELECT	1uF	20%	50V
C619	1-126-959-11	ELECT	0.47uF	20%	50V
C621	1-126-959-11	ELECT	0.47uF	20%	50V
C626	1-136-165-00	MYLAR	0.1uF	5%	50V
C627	1-126-941-11	ELECT	470uF	20%	25V
C633	1-124-584-00	ELECT	100uF	20%	10V
C668	1-126-955-11	ELECT	4700uF	20%	35V
C669	1-126-955-11	ELECT	4700uF	20%	35V
C697	1-136-169-00	FILM	0.22uF	5%	50V
C698	1-136-169-00	FILM	0.22uF	5%	50V
C699	1-136-169-00	FILM	0.22uF	5%	50V
		< CONNECTOR >			
CNP601	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CNP602	1-564-506-11	PLUG, CONNECTOR 3P			
* CNP603	1-564-505-11	PLUG, CONNECTOR 2P			
* CNP605	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< DIODE >			
D606	8-719-921-75	DIODE MTZN-10B			
D607	8-719-991-33	DIODE 1SS133T-77			
D608	8-719-991-33	DIODE 1SS133T-77			
D609	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description			Remark
		< JACK >			
J601	1-774-785-11	JACK, PIN 1P (SIGNAL INPUT WOOFER)			
		< TRANSISTOR >			
Q601	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q609	8-729-902-80	TRANSISTOR DTA114YS			
Q610	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q611	8-729-029-72	TRANSISTOR DTC114YSA			
Q612	8-729-142-46	TRANSISTOR 2SC2001-LK			
Q615	8-729-142-46	TRANSISTOR 2SC2001-LK			
		< RESISTOR >			
R601	1-249-389-11	CARBON	4.7	5%	1/4W
R604	1-249-413-11	CARBON	470	5%	1/4W
R606	1-247-863-31	CARBON	22K	5%	1/4W
R607	1-249-421-11	CARBON	2.2K	5%	1/4W
R608	1-249-441-11	CARBON	100K	5%	1/4W
R609	1-249-431-11	CARBON	15K	5%	1/4W
R610	1-249-441-11	CARBON	100K	5%	1/4W
R611	1-249-413-11	CARBON	470	5%	1/4W
R612	1-249-429-11	CARBON	10K	5%	1/4W
R613	1-249-421-11	CARBON	2.2K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-425-11	CARBON	4.7K	5%	1/4W
R617	1-247-895-00	CARBON	470K	5%	1/4W
R618	1-247-895-00	CARBON	470K	5%	1/4W
R619	1-247-895-00	CARBON	470K	5%	1/4W
R620	1-249-425-11	CARBON	4.7K	5%	1/4W
R621	1-249-437-11	CARBON	47K	5%	1/4W
R622	1-247-895-00	CARBON	470K	5%	1/4W
R623	1-249-421-11	CARBON	2.2K	5%	1/4W
R625	1-249-421-11	CARBON	2.2K	5%	1/4W
R626	1-249-429-11	CARBON	10K	5%	1/4W
⚠ R627	1-219-112-11	FUSIBLE	10	5%	1/4W F
R628	1-249-419-11	CARBON	1.5K	5%	1/4W
R630	1-249-421-11	CARBON	2.2K	5%	1/4W
R631	1-249-411-11	CARBON	330	5%	1/4W
R633	1-247-843-11	CARBON	3.3K	5%	1/4W
R634	1-249-413-11	CARBON	470	5%	1/4W
R635	1-249-413-11	CARBON	470	5%	1/4W
R636	1-249-425-11	CARBON	4.7K	5%	1/4W
R637	1-249-425-11	CARBON	4.7K	5%	1/4W
R638	1-247-903-00	CARBON	1M	5%	1/4W
R640	1-249-417-11	CARBON	1K	5%	1/4W

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
R641	1-249-434-11	CARBON	27K	5%	1/4W
R642	1-249-441-11	CARBON	100K	5%	1/4W
R645	1-247-863-00	CARBON	22K	5%	1/4W
R646	1-249-432-11	CARBON	18K	5%	1/4W
R647	1-247-863-31	CARBON	22K	5%	1/4W
**********					
*	1-672-061-11	S/WOOFER AMP2 BOARD			
		**********			
		< CAPACITOR >			
C603	1-124-234-00	ELECT	22uF	20%	16V
C620	1-126-157-11	ELECT	10uF	20%	50V
C623	1-126-160-11	ELECT	1uF	20%	50V
		< IC >			
IC601	8-759-549-76	IC TDA2052V			
		< RESISTOR >			
R602	1-249-437-11	CARBON	47K	5%	1/4W
R603	1-249-411-11	CARBON	330	5%	1/4W
R605	1-247-863-00	CARBON	22K	5%	1/4W
R632	1-249-421-11	CARBON	2.2K	5%	1/4W
**********					
*	1-671-492-11	WOOFER POWER BOARD			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CAPACITOR >			
C661	1-101-005-00	CERAMIC	22000PF		50V
C662	1-101-005-00	CERAMIC	22000PF		50V
C663	1-101-005-00	CERAMIC	22000PF		50V
C664	1-101-005-00	CERAMIC	22000PF		50V
C665	1-101-005-00	CERAMIC	22000PF		50V
C666	1-101-005-00	CERAMIC	22000PF		50V
		< DIODE >			
D601	8-719-902-17	DIODE U15G			
D602	8-719-902-17	DIODE U15G			
D603	8-719-902-17	DIODE U15G			
D604	8-719-902-17	DIODE U15G			
		< FUSE >			
⚠F602	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)			
⚠F603	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)			
		< TRANSFORMER >			
⚠T601	1-433-450-11	TRANSFORMER, POWER (SUPER WOOFER)			
**********					

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
3	1-782-296-11	WIRE, PARALLEL (FFC) (27 CORE)	
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)	
111	1-452-732-11	MAGNET	
120	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
126	1-783-983-11	WIRE, PARALLEL (19 CORE)	
152	X-2626-202-2	CHASSIS ASSY (MB), MOTOR (SPINDLE) (INCLUDING M701)	
⚠154	8-848-483-08	PICK-UP, OPTICAL KSS-213C/Z-N	
⚠314	1-575-651-11	CORD, POWER (for SPEAKER (L))	
319	1-790-161-11	CORD, SPEAKER (for SPEAKER (L))	
355	1-790-161-11	CORD, SPEAKER (for SPEAKER (R))	
⚠414	1-575-651-11	CORD, POWER (for WOOFER SPEAKER)	
⚠415	1-785-575-11	SOCKET, AC	
428	1-790-161-11	CORD, SPEAKER (for WOOFER SPEAKER)	
⚠F501	1-532-505-31	FUSE, TIME-LAG (T5AL/250V)	
⚠F601	1-532-501-31	FUSE, TIME-LAG (T0.8AL/250V)	
⚠F602	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
⚠F603	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
HRPE101	1-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)	
M691	3-016-425-01	MOTOR ASSY (CAPSTAN/REEL)	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	
PM691	1-454-806-11	SOLENOID, PLUNGER	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (⏏ PUSH OPEN/CLOSE)	
SP101	1-505-607-11	SPEAKER (8cm) (L-CH)	
SP201	1-505-607-11	SPEAKER (8cm) (R-CH)	
SP601	1-529-134-11	SPEAKER (WOOFER)	
⚠T501	1-433-453-11	TRANSFORMER, POWER (SET)	
⚠T601	1-433-450-11	TRANSFORMER, POWER (SUPER WOOFER)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-501-594-11	ANTENNA (FM)	
	1-501-843-11	ANTENNA, LOOP (MW/LW)	
	1-590-478-11	CORD, CONNECTION (2P-2P) (for AUDIO)	
	1-783-971-11	CORD, CONNECTION (1P-1P) (for WOOFER)	
	3-864-718-11	MANUAL, INSTRUCTION (ENGLISH,SPANISH) (AEP)	
	3-864-718-21	MANUAL, INSTRUCTION (FRENCH,GERMAN) (AEP)	
	3-864-718-31	MANUAL, INSTRUCTION (DUTCH,PORTUGUESE) (AEP)	
	3-864-718-41	MANUAL, INSTRUCTION (ITALIAN) (IT)	
	3-864-718-51	MANUAL, INSTRUCTION (SWEDISH,FINNISH) (CET)	
	3-864-718-61	MANUAL, INSTRUCTION (POLISH) (CET)	
	3-864-718-71	MANUAL, INSTRUCTION (CZECH,HUNGARIAN) (CET)	
*	4-941-548-11	LABEL, CLASS (1)	
	4-991-047-01	LID, BATTERY CASE (for RMT-C305AD)	
	8-917-602-90	REMOCON, RMT-C305AD SET	
	X-3374-593-1	CORD (ANTENNA) ASSY	
**********			

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#2	7-685-247-19	SCREW +KTP 3X10 TYPE2 NON-SLIT	
#3	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
#4	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT	
#5	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S	
#6	7-685-851-04	SCREW +BVTT 2X4 (S)	
#7	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#8	7-685-871-01	SCREW +BVTT 3X6 (S)	
#9	7-685-645-79	SCREW +P 3X6 TYPE2 NON-SLIT	
#10	7-685-158-19	SCREW +P 4X6 TYPE2 NON-SLIT	
#11	7-682-554-09	SCREW +B 3X25	
#12	7-685-546-19	SCREW +B 3X8	

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PMC-D407L

SERVICE MANUAL

Ver 1.1 1999. 02

AEP Model
UK Model

CD Section	Model Name Using Similar Mechanism	PMC-D307L
	CD Mechanism Type	KSM-213CDM
	Optical Pick-up Name	KSS-213C
Tape Section	Model Name Using Similar Mechanism	PMC-D307L
	Tape Transport Mechanism Type	MF-D307

SPECIFICATIONS

CD player section

System
Compact disc digital audio system
Laser diode properties
Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 µW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
2
Frequency response
20 - 20,000 Hz +1/–2.5 dB
Wow and flutter
Below measurable limit

Radio section

Frequency range

FM	Except Italian model	87.6 - 107 MHz
	Italian model	87.5 - 108 MHz
MW		531 - 1,602 kHz
LW		153 - 279 kHz

IF
FM: 10.7 MHz
MW/LW: 450 kHz
Aerials
FM: External aerial terminal
MW/LW: External aerial terminal

Cassette-corder section

Recording system
4-track 2-channel stereo
Fast winding time
Approx. 130 s (sec.) with Sony cassette C-60
Frequency response
TYPE I (normal): 40 - 15,000 Hz

Super woofer

Speaker
Woofer: 10 cm (4 in.) dia., 4.0 ohms, cone type
Power output
30 W (at 100 Hz)
Power consumption
AC 30 W
Dimensions (incl. projecting parts)
Approx. 210 × 210 × 247 mm (w/h/d)
(8 3/8 × 8 3/8 × 9 3/4 inches)
Mass
Approx. 4.1 kg (9 lb. 1 oz.)

– Continued on next page –

PERSONAL COMPONENT SYSTEM

MICROFILM

SONY®

General

Speaker
- Full range: 8 cm (3 1/4 in.) dia., 6.0 ohms, cone type × 2

Input
- LINE IN jack (stereo minijack)
- Minimum input level 250 mV

Outputs
- Headphones jack (stereo minijack)
- For 16 - 68 ohms impedance headphones
- LINE OUT jack (stereo minijack)
- Rated output level 440 mV at load impedance 47 kilohms
- Optical digital output (optical output connector)
- Wave length: 630 - 690 nm

Maximum power output
- 10 W + 10 W

Power requirements
- For personal component system: 230 V AC, 50 Hz
- For remote commander: 3 V DC, 2 R6 (size AA) batteries

Power consumption
- AC 35 W

Dimensions (incl. projecting parts)
- Player: approx. 130 × 211 × 200 mm (w/h/d) (5 1/8 × 8 3/8 × 7 7/8 inches)
- Left speaker: approx. 130 × 210 × 235 mm (w/h/d) (5 1/8 × 8 3/8 × 9 3/8 inches)
- Right speaker: approx. 130 × 210 × 200 mm (w/h/d) (5 1/8 × 8 3/8 × 7 7/8 inches)

Mass
- Player: approx. 1.7 kg (3 lb. 12 oz.)
- Left speaker: approx. 3.2 kg (7 lb. 1 oz.)
- Right speaker: approx. 1.6 kg (3 lb. 9 oz.)

Supplied accessories
- Remote commander RMT-C305AD (1)
- FM lead aerial (1)
- MW/LW loop aerial (1)
- Audio connecting cord (2)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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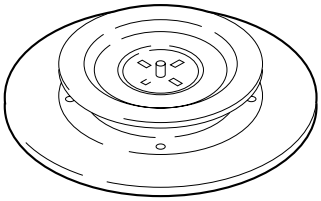
SECTION 1
SERVICING NOTES

CHUCK PLATE JIG ON REPAIRING

On repairing CD section, playing a disc without the lid (CD), use Chuck Plate Jig.
• Code number of Chuck Plate Jig: X-4918-255-1



NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

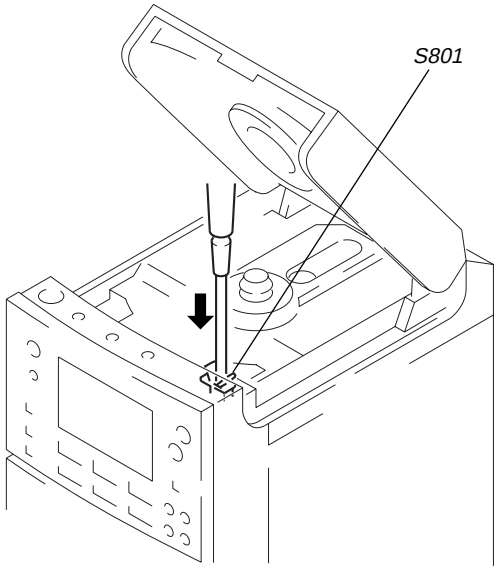
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT table is location on the rear exterior.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

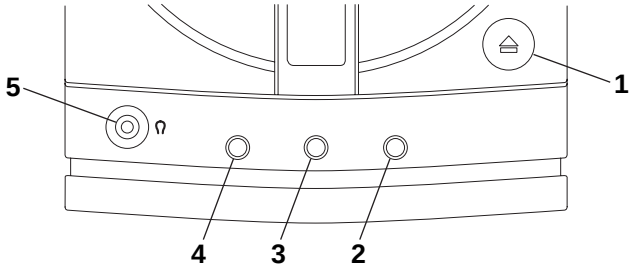
1. Turn OPERATE switch on with to disc inserted and press FUNCTION button to CD position.
2. Open the lid (CD).
3. Turn on S801 as following figure.
4. Press the ► (CD) button.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
   Objective lens moves up and down three times for focus search.



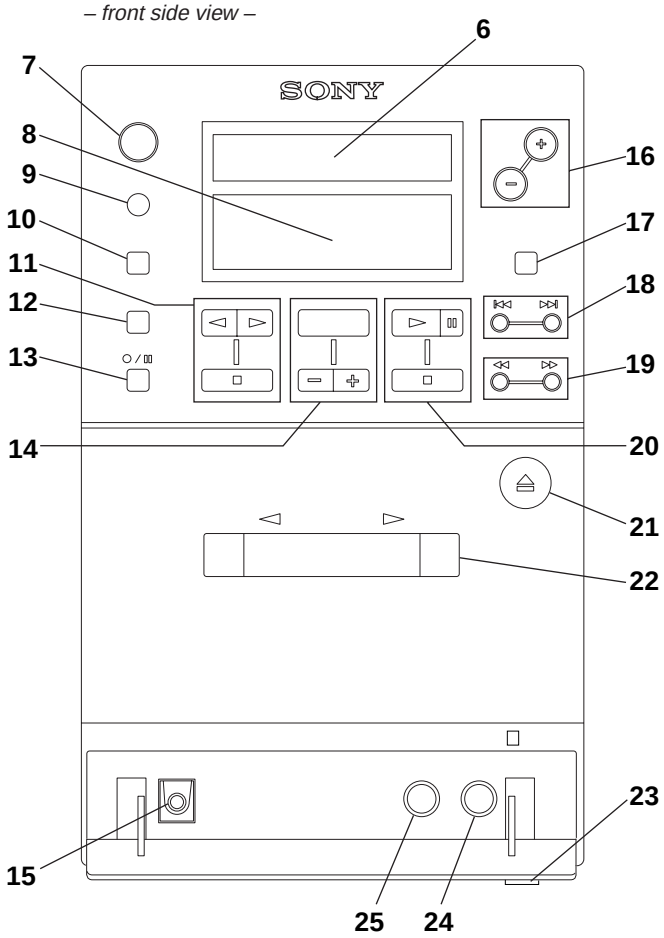
SECTION 2
GENERAL

2-1. LOCATION OF CONTROLS

– upper side view –



– front side view –



1. ⏏ PUSH OPEN/CLOSE button (CD)
2. PLAY MODE MONO/ST ISS button
3. PGM SET AUTO PRESET button
4. SOUND button
5. ∩ (Headphones) jack
6. RDS display window
7. OPERATE (power) button
8. Display window
9. Remote sensor window
10. FUNCTION button
11. TAPE operation buttons
    ◄ (Reverse side playback) button
    ► (Front side playback) button
    ■ (Stop) button
12. DIR MODE button
13. ●/❚❚ (Recording/pause) button
14. RADIO operation buttons
    BAND button
    PRESET – button
    PRESET + button
15. OPTICAL DIGITAL OUT (CD) jack
16. VOLUME +/– button
17. DISPLAY ENTER/MEM button
18. ⏮/⏭, TUNE –/+ button
19. ◄◄/►► button
20. CD operation buttons
    ► (Playback) button
    ❚❚ (Pause) button
    ■ (Stop) button
21. ⏏ PUSH (cassette holder open) button
22. Cassette holder
23. OPEN ▼ knob
24. LINE OUT jack
25. LINE IN jack

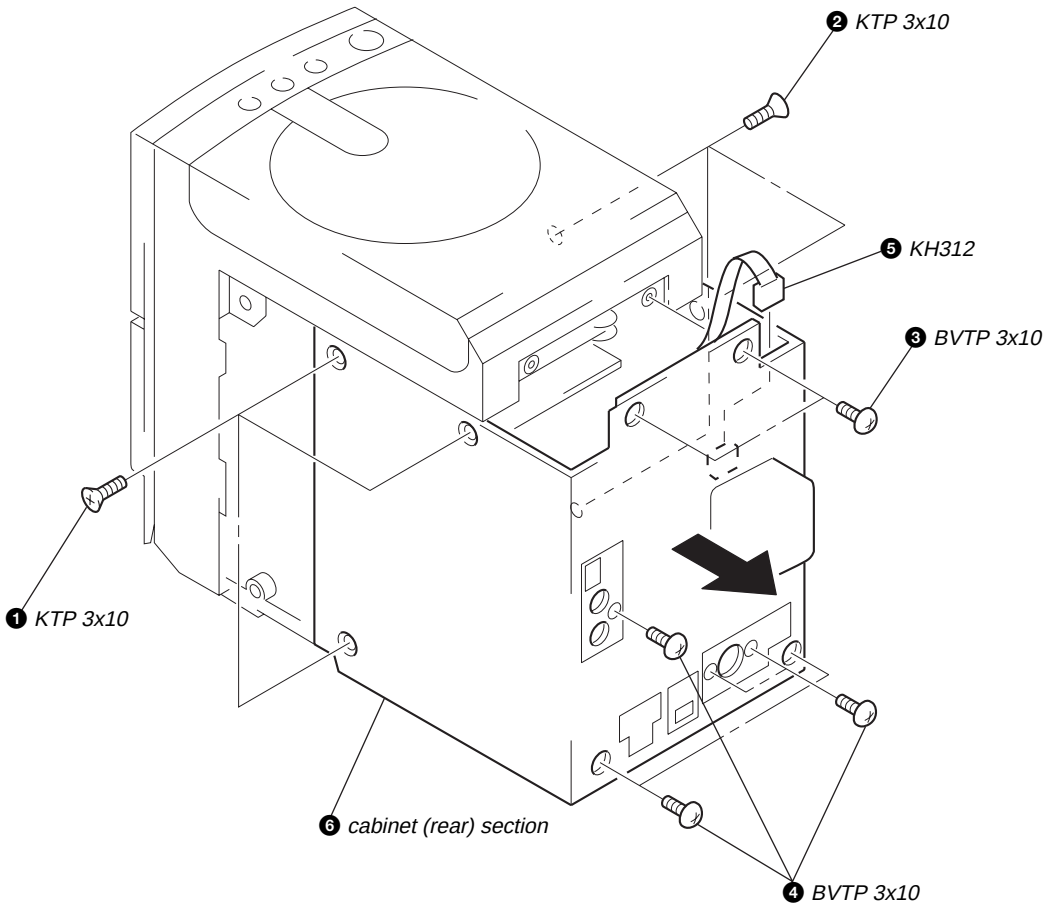
SECTION 3
DISASSEMBLY

• The equipment can be removed using the following procedure.

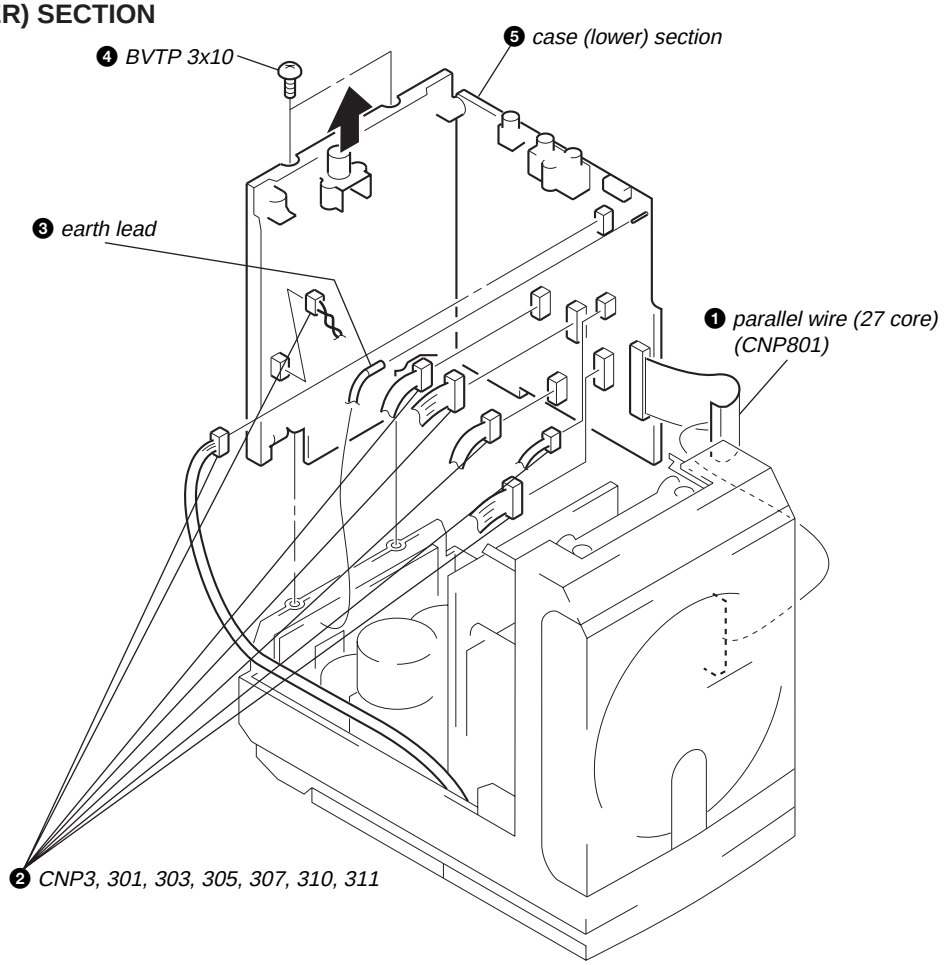
Set
- Cabinet (rear) section ➡ Case (lower) section ➡ Cabinet (CD) section ➡ CD, System board ➡ RDS board, LCD section
- Optical pick-up section
- Tape mechanism deck, Line board
- Rear chassis (speaker) assy ➡ Power Amp, Terminal, Jack board ➡ Power board
- Rear chassis (woofer speaker) assy ➡ S/Woofer Amp board ➡ Woofer power board

Note : Follow the disassembly procedure in the numerical order given.

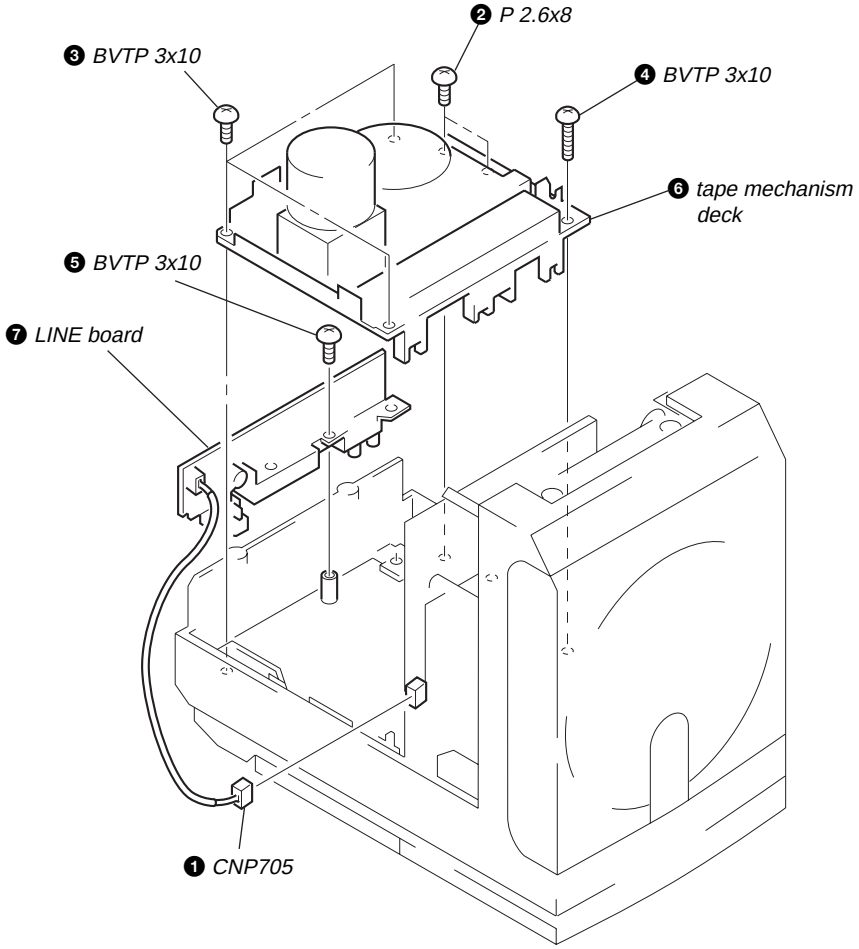
3-1. CABINET (REAR) SECTION



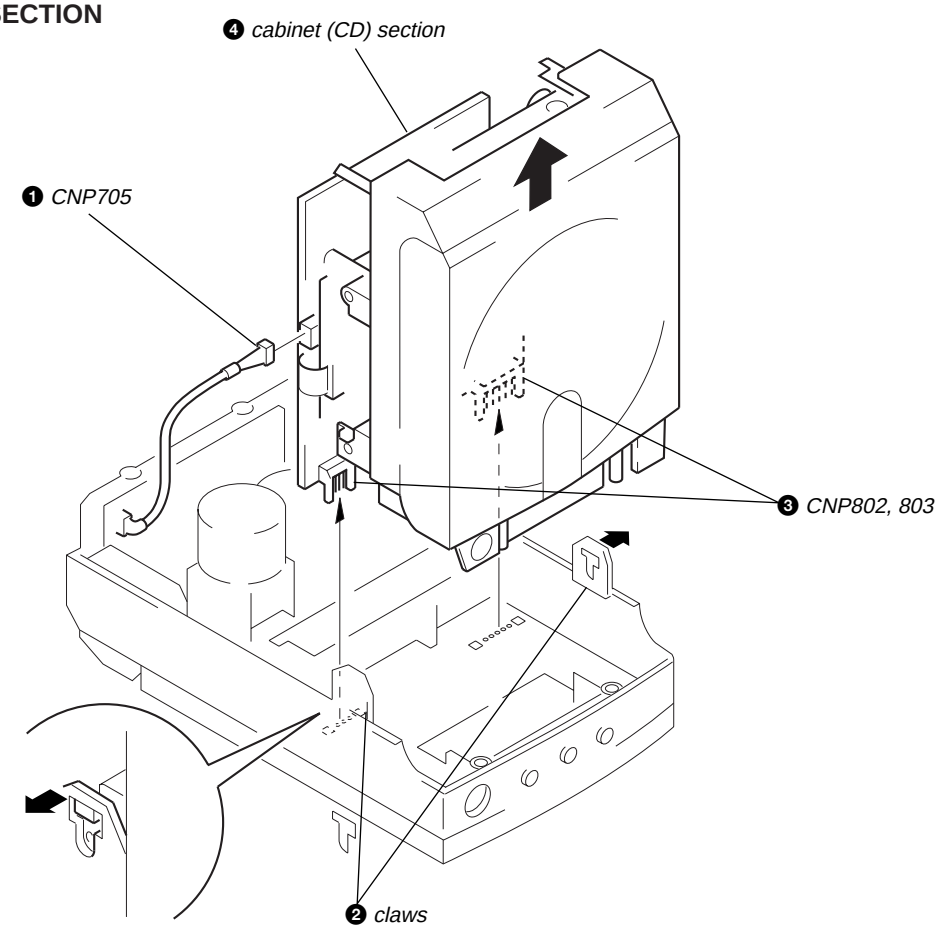
3-2. CASE (LOWER) SECTION



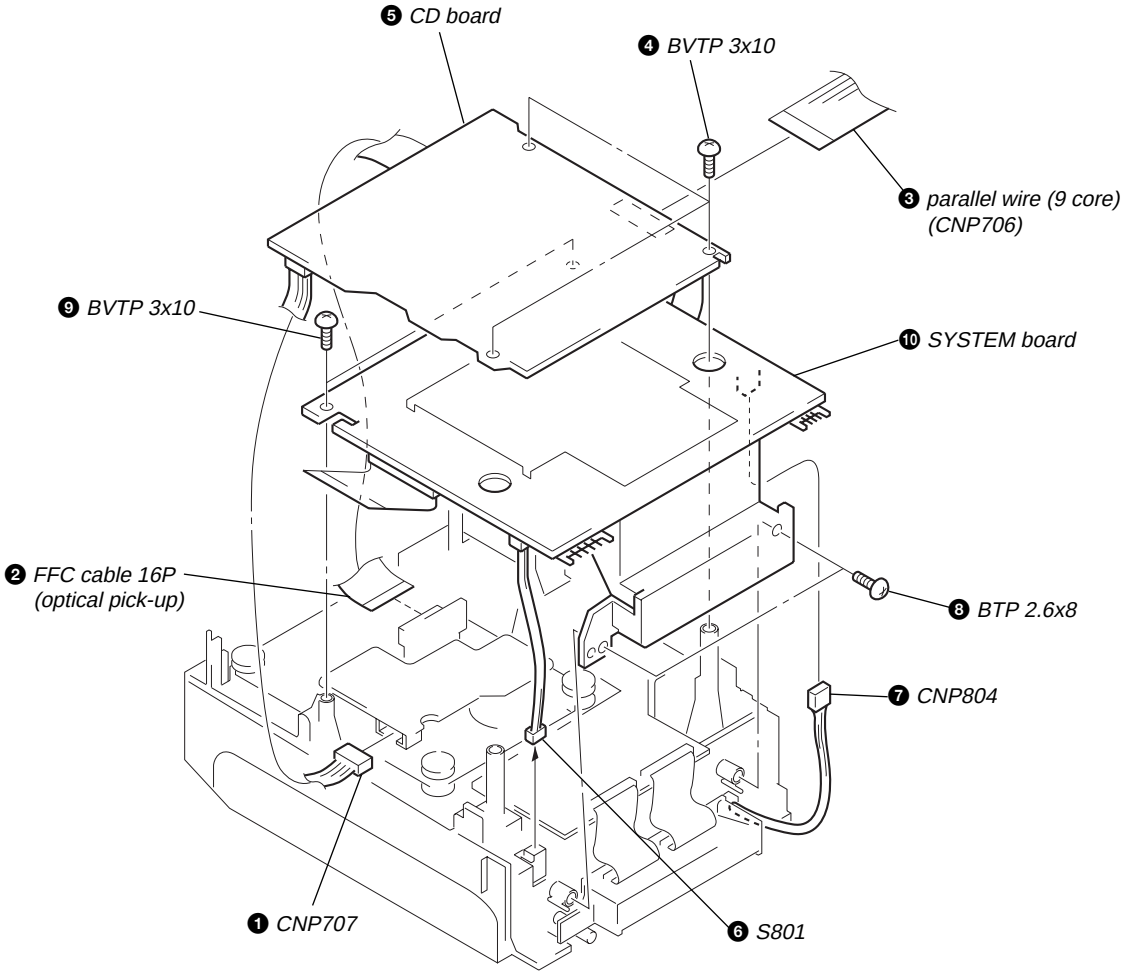
3-3. TAPE MECHANISM DECK, LINE BOARD



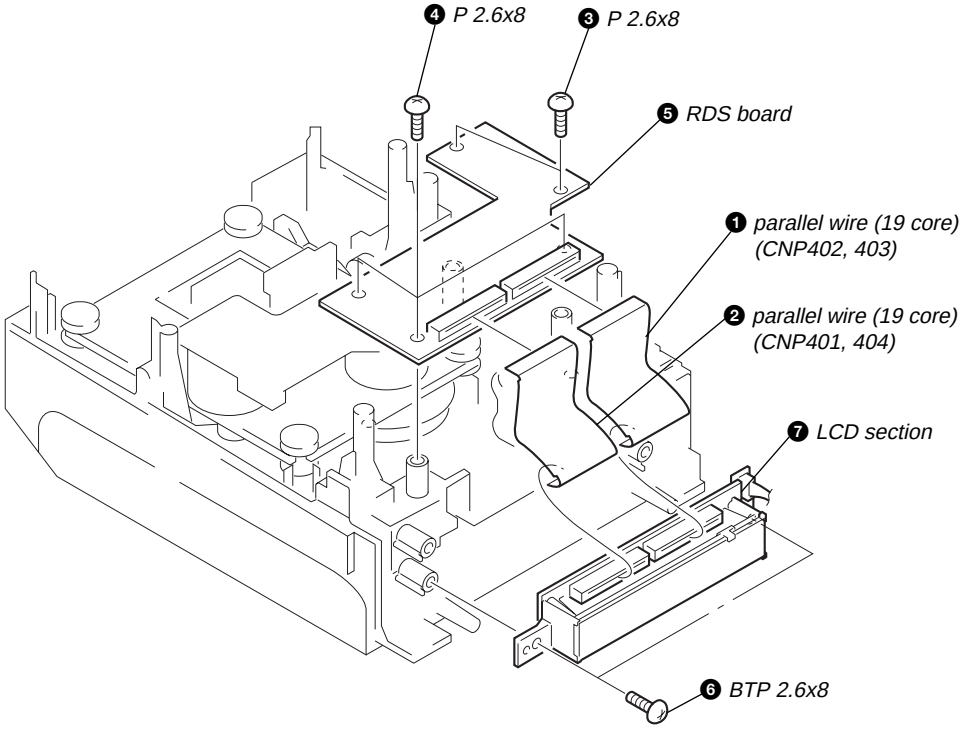
3-4. CABINET (CD) SECTION



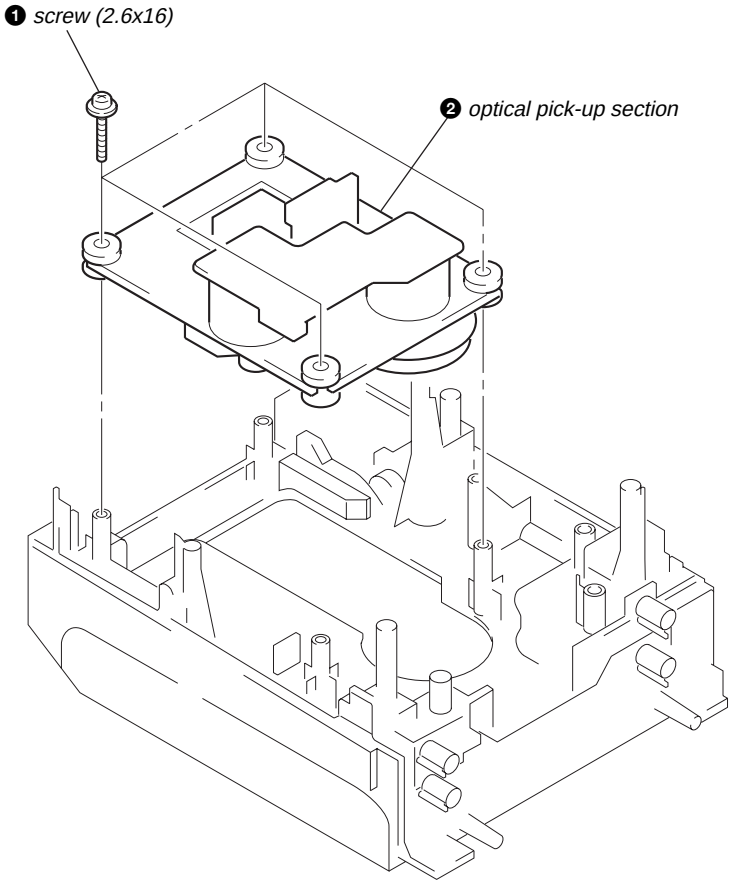
3-5. CD, SYSTEM BOARD



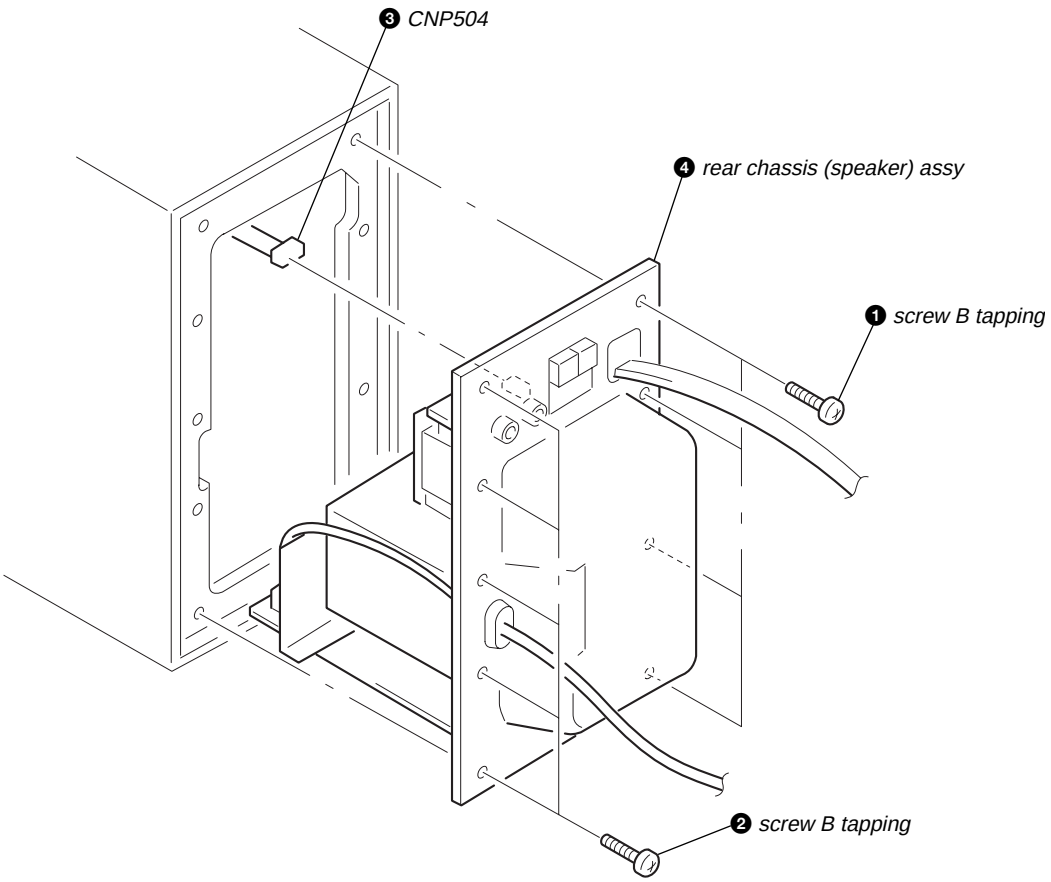
3-6. RDS BOARD, LCD SECTION



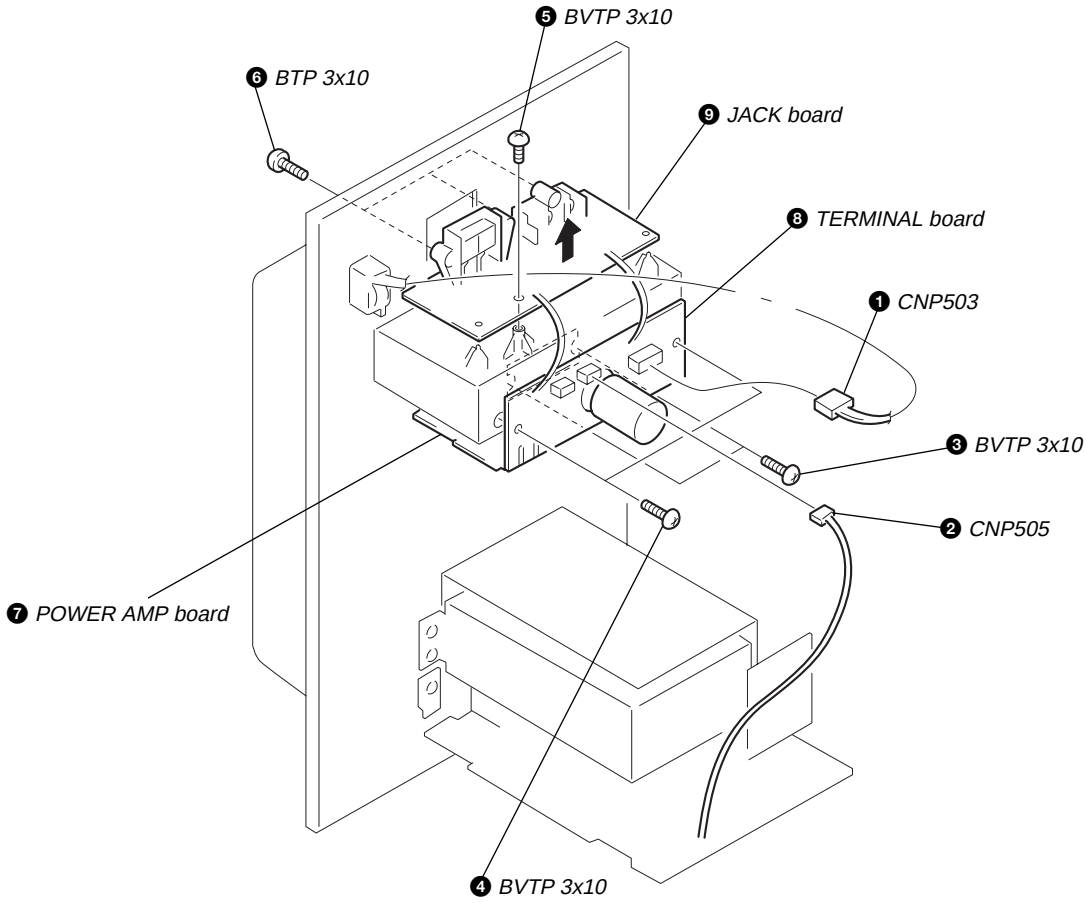
3-7. OPTICAL PICK-UP SECTION



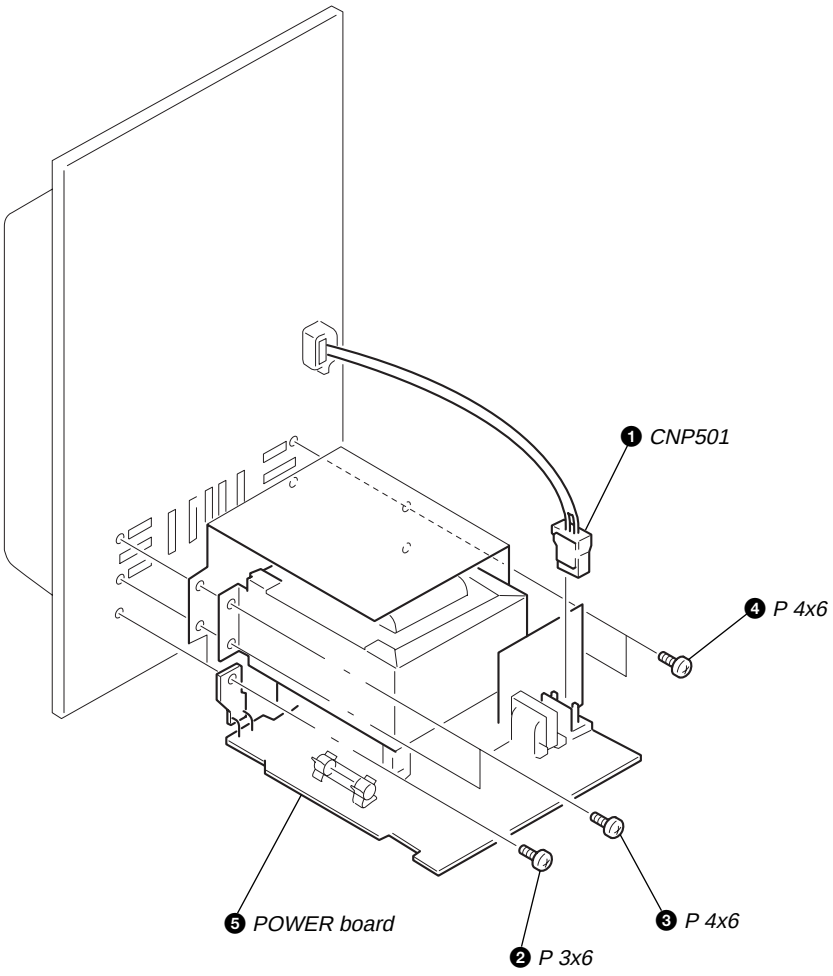
3-8. REAR CHASSIS (SPEAKER) ASSY



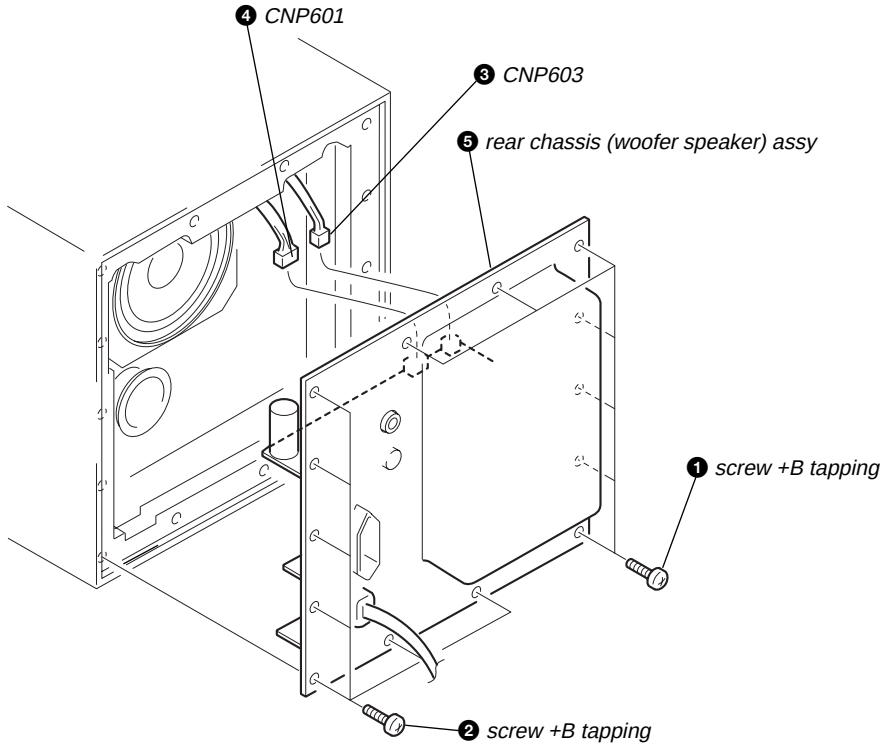
3-9. POWER AMP, TERMINAL, JACK BOARD



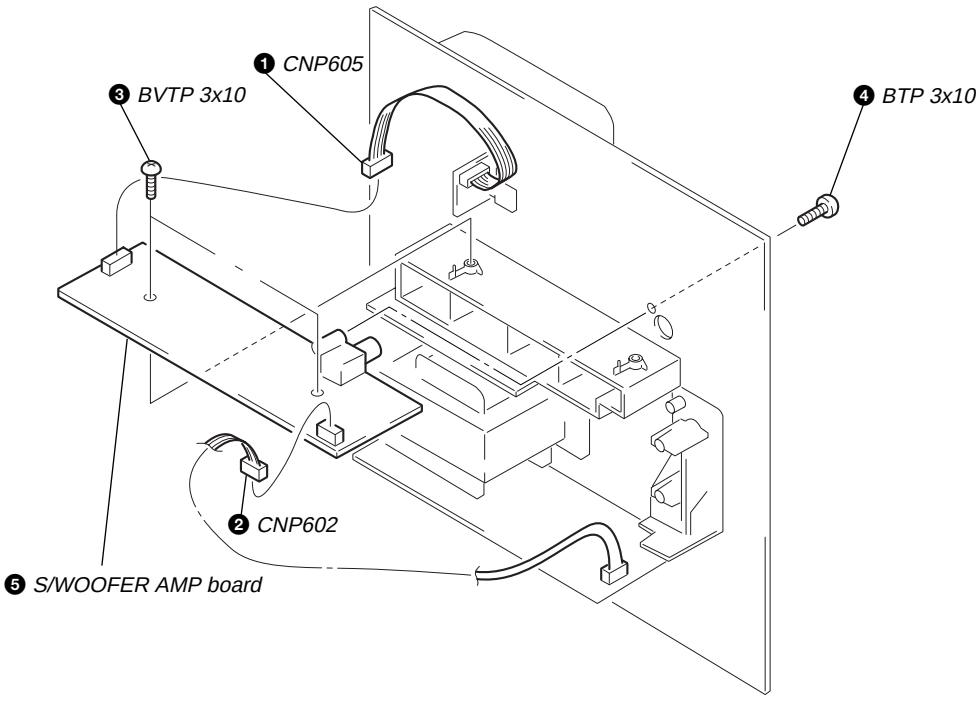
3-10. POWER BOARD



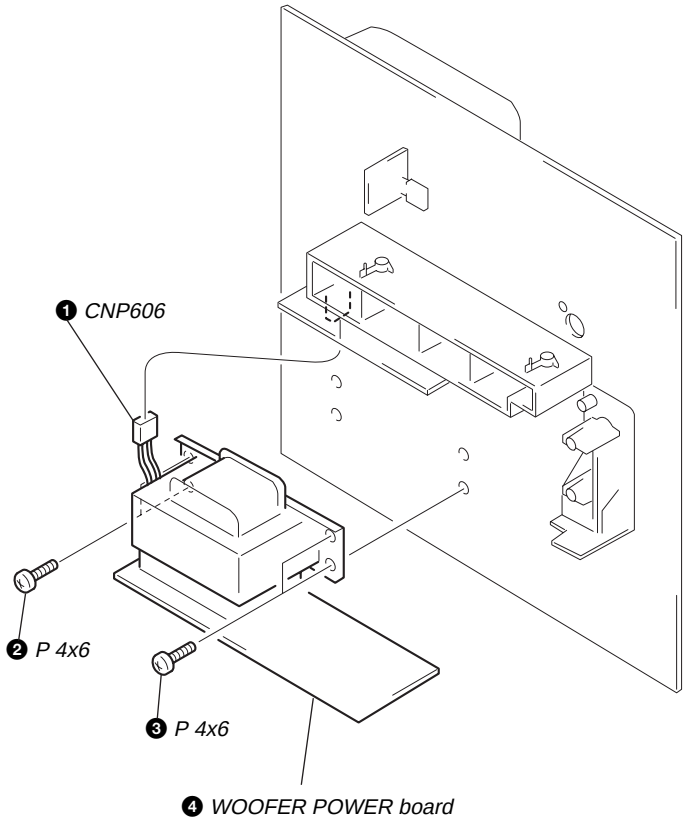
3-11. REAR CHASSIS (WOOFER SPEAKER) ASSY



3-12. S/WOOFER AMP BOARD



3-13. WOOFER POWER BOARD



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback/erase head, pinch roller, rubber belts, capstan, idlers
2. Demagnetize the record/playback/erase head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	30 – 70 g•cm (0.42 – 1.02 oz•inch)
FWD Back tension		2.0 – 6.0 g•cm (0.028 – 0.076 oz•inch)
REV	CQ-102RC	30 – 70 g•cm (0.42 – 1.02 oz•inch)
REV Back tension		2.0 – 6.0 g•cm (0.028 – 0.076 oz•inch)
FF, REW	CQ-201B	80 – 170 g•cm (1.12 – 2.38 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 90 g (more than 3.17 oz)
REV	CQ-403R	

SECTION 5
ELECTRICAL ADJUSTMENTS

TAPE SECTION **0 dB = 0.775 V**

1. The adjustments should be performed in the order given in the service manual. (As a general rule. Playback circuit adjustment should be completed before performing recording circuit adjustment.)
2. The adjustments should be performed for both L-ch and R-ch unless otherwise indicated.

Standard Output Level

	SP OUT	PHONES
Load impedance	6 Ω	32 Ω
Output level	0.775 V (0 dB)	0.25 V (–10 dB)

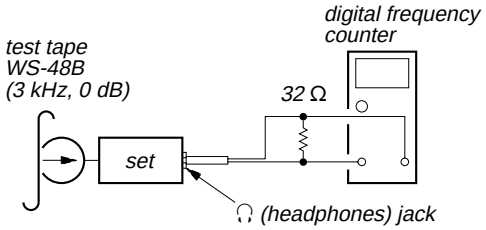
Test Tape

Type	Signal	Used for
WS-48B	3 kHz, 0 dB	Tape speed adjustment
P-4-A063	6.3 kHz, –10 dB	Head azimuth adjustment

Tape Speed Adjustment

Procedure:

Mode: playback



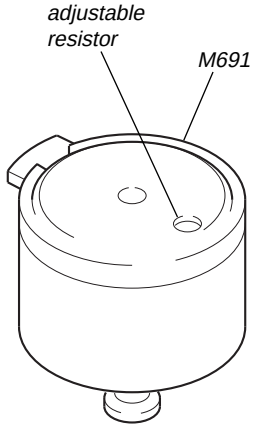
Adjust so that the value on the frequency counter is 3 kHz.

Specification Values:

Digital frequency counter
2,970 to 3,030 Hz

Adjust so that the frequency at the beginning and that at the end of tape winding are between 2,970 and 3,030 Hz.

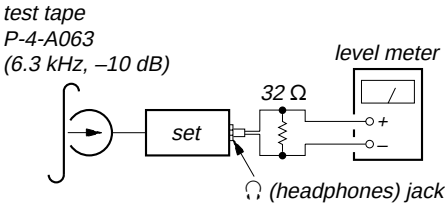
Adjustment Location:



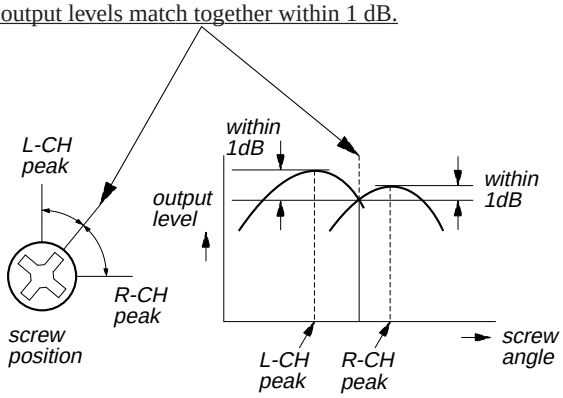
Record/Playback/Erase Head Azimuth Adjustment

Procedure:

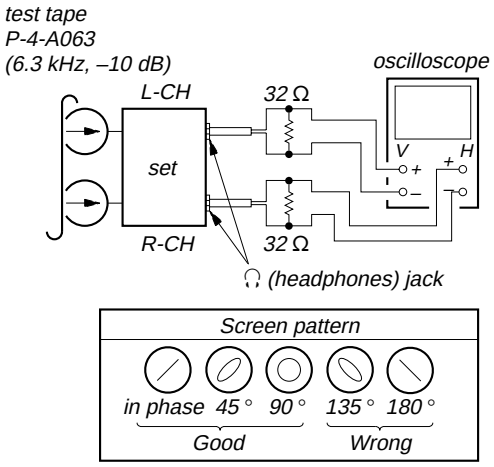
1. Mode: playback



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.

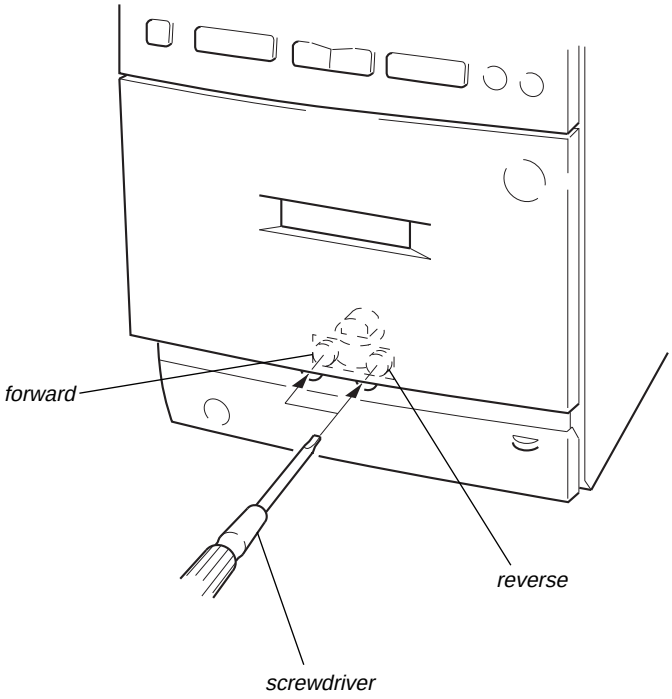


3. Phase Check
   Mode: playback



4. After the adjustment, lock the screws with locking compound.

Adjustment Location:



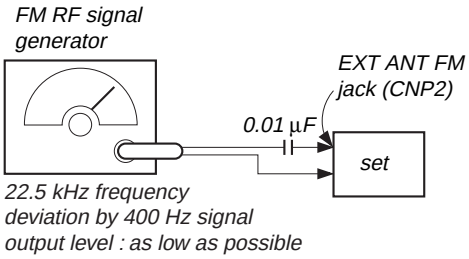
TUNER SECTION | 0 dB = 1 µV

Precautions in Repairing

Note : As a tuner unit (TU1) is difficult to repair if faulty, replace it with new one.

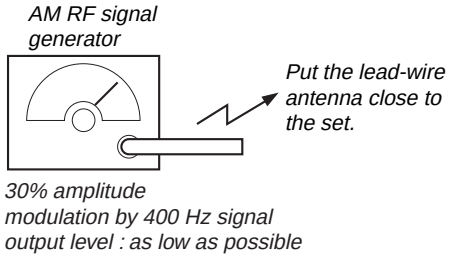
- **FM Section**

Setting:
FUNCTION button: FM

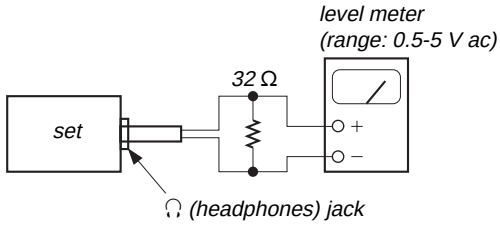

FM RF signal generator
EXT ANT FM jack (CNP2)
0.01 µF
set
22.5 kHz frequency deviation by 400 Hz signal output level : as low as possible

- **MW/LW Section**

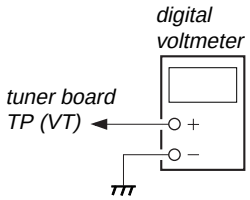
Setting:
FUNCTION button: MW or LW


AM RF signal generator
Put the lead-wire antenna close to the set.
30% amplitude modulation by 400 Hz signal output level : as low as possible

- **Connecting Level Meter (FM, MW and LW)**



- **Connecting Digital Voltmeter (FM, MW and LW)**



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM FREQUENCY COVERAGE CHECK		
Frequency Display	87.5 MHz	108 MHz
Reading on Digital voltmeter	1.3 V or more	9.0 V or less
Adjustment Part	<confirmation>	<confirmation>

FM TRACKING CHECK	
Adjust for a maximum reading on level meter.	
<confirmation>	<confirmation>
87.5 MHz	108 MHz

MW FREQUENCY COVERAGE CHECK		
Frequency Display	531 kHz	1,611 kHz
Reading on Digital voltmeter	0.85 ± 0.5 V	6.8 ± 1.5 V
Adjustment Part	<confirmation>	<confirmation>

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	CT4
621 kHz	1,404 kHz

AM IF ADJUSTMENT
Adjust for a maximum reading on level meter.
CFT1
450 kHz

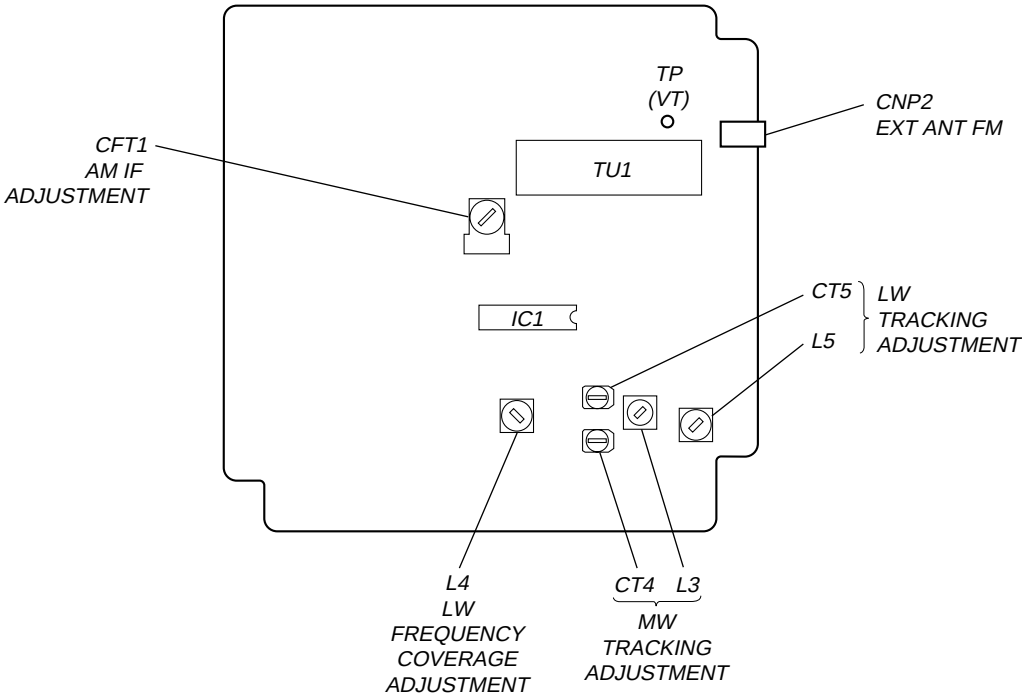
LW FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	153 kHz	279 kHz
Reading on Digital voltmeter	0.6 ± 0.4 V	7.5 ± 0.5 V
Adjustment Part	<confirmation>	L4

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L5	CT5
162 kHz	261 kHz

Adjustment Location: TUNER board (See page 15.)

Adjustment Location:

– tuner board (component side) –



CD SECTION

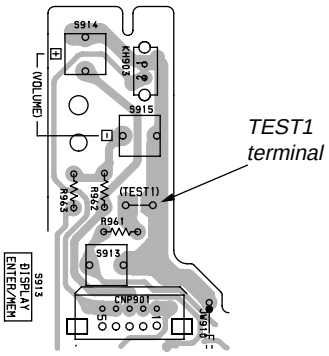
Notes on Adjustment

1. Perform adjustment in test mode.
   After adjustments, be sure to release test mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18. Part No. 3-702-101-01) only when so indicated.

How to Put the Set into Test Mode

1. Disconnect an AC plug cord. (Power is not applied to the set.)
2. Solder across the TEST1 terminal.
3. Close the lid (CD).
4. Connect an AC plug cord.

[SW1 BOARD] (Conductor Side)



How to Release the Test Mode

1. Be sure to disconnect the AC plug cord and remove the solder bridge at the TEST1 terminal connected before in setting.
2. The set thus becomes available for normal operation

Before Beginning Adjustment

Put the set into test mode and perform the following checks. Repair if there are any problems.

• Sled Motor Check

Press the ▶▶I, I◀◀ buttons and confirm that the optical pick-up moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.

▶▶I : Optical pick-up moves to the outer circumference
I◀◀ : Optical pick-up moves to the inner circumference

• Focus Search Check

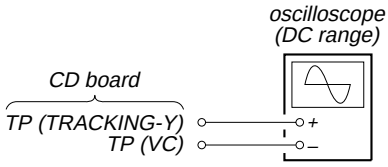
1. Press the ► button. (Focus search operation is performed continuously.)
2. Look at the optical pick-up objective lens and confirm that it moves up and down smoothly, when no catching or abnormal noises.
3. Press the ■ button.
   Confirm that focus search operation stops. If it does not , press the ■ button again longer.

Note: When the malfunction is occurred by mis-passing other keys, turn off the power and check again from making the test mode.

E-F Balance Adjustment

This adjustment is to be done when the optical pick-up is replaced.

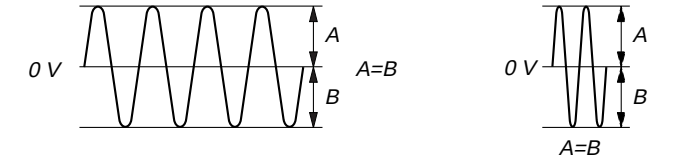
Procedure:



1. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid (CD).
3. Put the set into test mode.
4. Press the ▶▶I and I◀◀ buttons to move the optical pick-up to the center.
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Adjust RV703 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.

Note: *Take long sweep time for easy monitoring.*

VOLT/DIV: 0.2 V (with the 10:1 probe in use.)
TIME/DIV: 1 ms



Adjustment value: 0.4 ± 0.2 Vp-p (A + B)

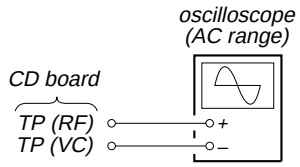
7. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 19.)

Focus Bias Adjustment

This adjustment is to be done when the optical pick-up is replaced.

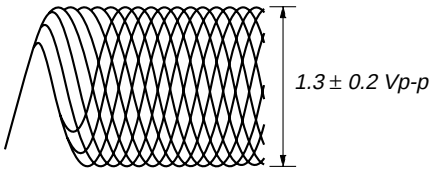
Procedure:



1. Connect the oscilloscope TP (RF) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid for CD.
3. Put the set into test mode. (See page 16.)
4. Press ▶▶I and I◀◀ buttons to move the optical pick-up to the center. (Move the optical pick-up to the music area on the disc to enable easy visibility of the eye pattern.)
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Press the ► button.
   [Both tracking and sled are turned ON.]
7. Adjust RV701 so that the oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

• RF signal reference waveform (eye pattern)

VOLT/DIV : 0.2 V (With the 10:1 probe in use)
TIME/DIV : 500 ns



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 19.)

REFERENCE

Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.
However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.
Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.
However, as these reciprocate, the adjustment is at the point where both are satisfied.

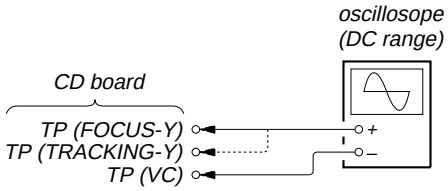
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for ■→► on automatic selection. (I◀◀, ▶▶I buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for ■→► or automatic selection. (I◀◀, ▶▶I buttons pressed.)	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

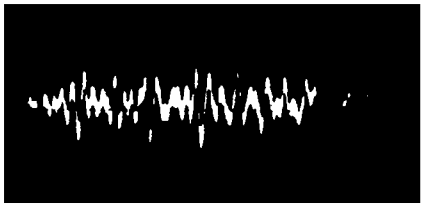
– Simple Adjustment –

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the primary adjustment are only a little different, return the controls to the original position.



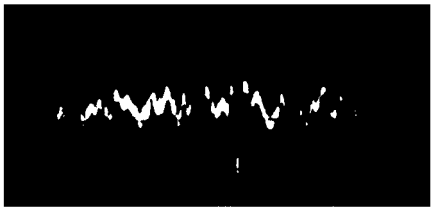
Procedure:

1. Keep the set horizontal.
   If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.
2. Connect the oscilloscope TP (FOCUS-Y) and TP (VC) on the CD board.
3. Insert the disc (YEDS-18) in and close the lid for CD.
4. Put the set into test mode. (See page 16.)
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Press the ► button.
   [Both tracking and sled are turned ON.]
7. Adjust RV702 so that the waveform is as shown in the figure below. (Focus gain adjustment)

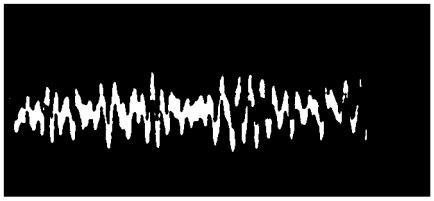


• Inconnect Examples (DC level changes more than on adjusted waveform)

low focus gain



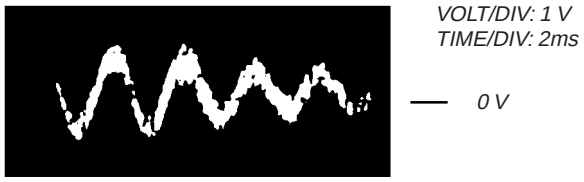
high focus gain



8. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
9. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)

• Incorrect Examples (fundamental wave appears)

low tracking gain



high tracking gain
high fundamental wave than for low gain

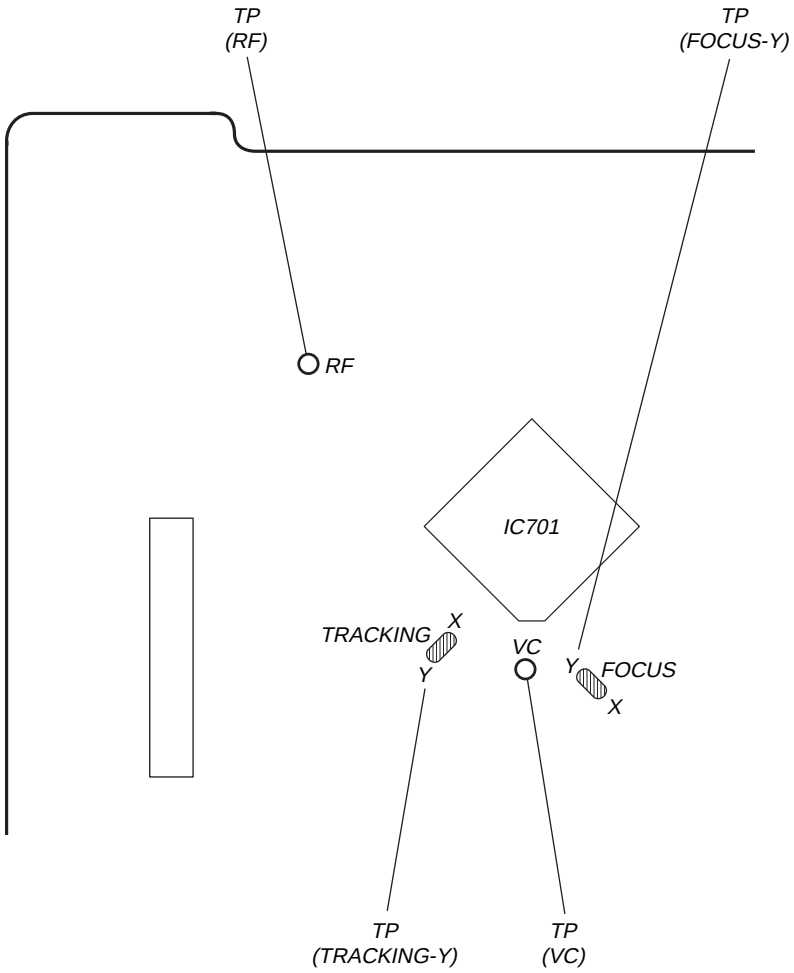
Note:
VOLT/DIV: with the 10:1 probe in used.

10. Release test mode after adjustment is completed.

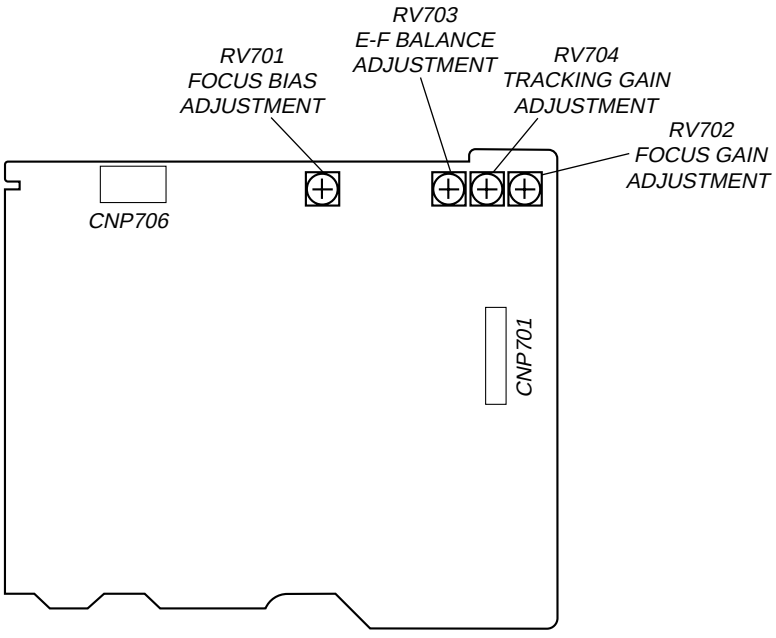
Adjustment Location: CD board (See page 19.)

Connection and Adjustment Location:

–CD board (conductor side)–



–CD board (component side)–



SECTION 6
DIAGRAMS

6-1. IC PIN DESCRIPTION

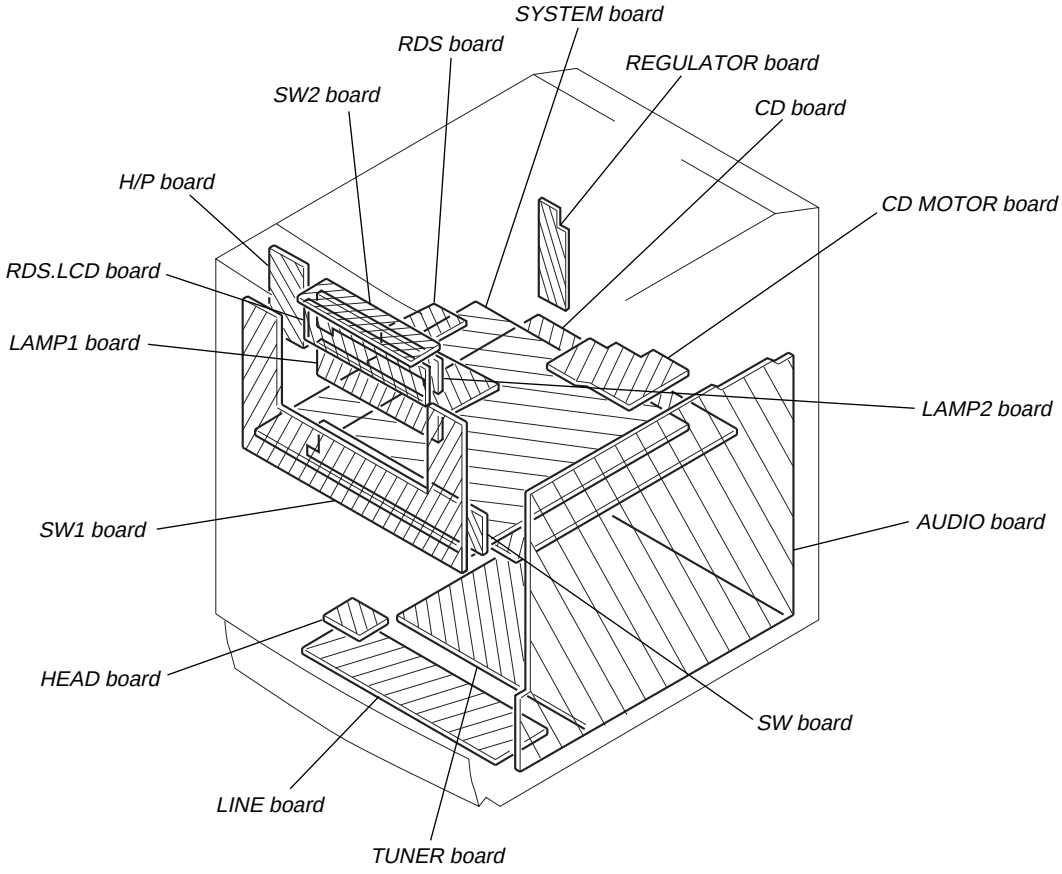
• IC801 CXP83120A-022Q (SYSTEM CONTROL, LCD DRIVE)

Pin No.	Pin Name	I/O	Pin Description
1	AC CHK	I	AC check input
2	C-SCOR	I	CD-SCOR input
3	RMC	I	Remote commander input
4	C-XRST	O	CD system reset output
5	C-XLAT	O	CD DSP (IC702) command latch output
6	C-DAT	O	CD DSP (IC702) command data output
7	C-CLK	O	Clock output for CD DSP (IC702) command
8	C-DOOR	I	Open/close detection input (“L”: close, “H”: open)
9	328/332	I	328/332 select input (Fixed at “H”.)
10	C-SENS	I	CD-SENS input
11	C-SQCK	O	Clock output for CD SUB-Q.
12	C-SQSO	I	CD SUB-Q input
13	T-BIAS	I	Tape REC BIAS input
14	—	—	Not used. (Open)
15	T-REC	I	Tape REC input
16	T-SOL	O	Plunger control output
17	T-MODE	O	HEAD switching output
18	T-AMS	I	AMS sensitivity switching
19	T-MCON	O	Motor control output (“H”: Motor ON)
20	P-CON	O	Power on/off control output
21	V-CLK	O	Volume clock output
22	V-DAT	O	Volume data output
23	V-CE	O	Electrical volume (IC302) chip enable output
24	R-ST	I	Stereo detection input
25	R-COUNT	I	Tuner PLL IC count input
26	R-DAT	O	Tuner PLL IC data output
27	R-CLK	O	Tuner PLL IC clock output
28	R-CE	O	Tuner PLL IC chip enable output
29	9K/10K	I	9K/10K select input (Fixed at “H”.)
30	T-STAT	I	Tape detection input
31 – 34	KEY-0 – 3	I	Key return signal input
35	INIT	O	Initial setting output (Not used.)
36	SIMUKE	I	Destination setting terminal (Fixed at “H”.)
37	SFC	O	Shift clock ON/OFF out
38	RST	I	Reset input
39	EXTAL1	I	Clock oscillation input (4.19 MHz)
40	XTAL1	O	Clock oscillation output (4.19 MHz)
41	VSS	—	Ground (for A/D converter)
42	XTAL2	O	Clock oscillation output (Not used.)
43	EXTAL2	I	Clock oscillation output (Fixed at “L”.)
44	AVREF	I	Reference voltage input (for A/D converter)
45	AVSS	—	Ground (for A/D converter)
46	VL	O	LCD bias resistor current control terminal (Cut off at standby)
47 – 49	VLC3 – 1	—	LCD bias power supply terminal
50 – 53	COM0 – 3	O	LCD common signal output terminal
54 – 77	SEG0 – 23	O	LCD segment signal output terminal
78 – 84	NC	—	Not used. (Open)
85 – 87	—	—	Not used. (Open)
88	BL-CONT	O	LCD Back light control output
89	VDD	—	Power supply (+5 V)

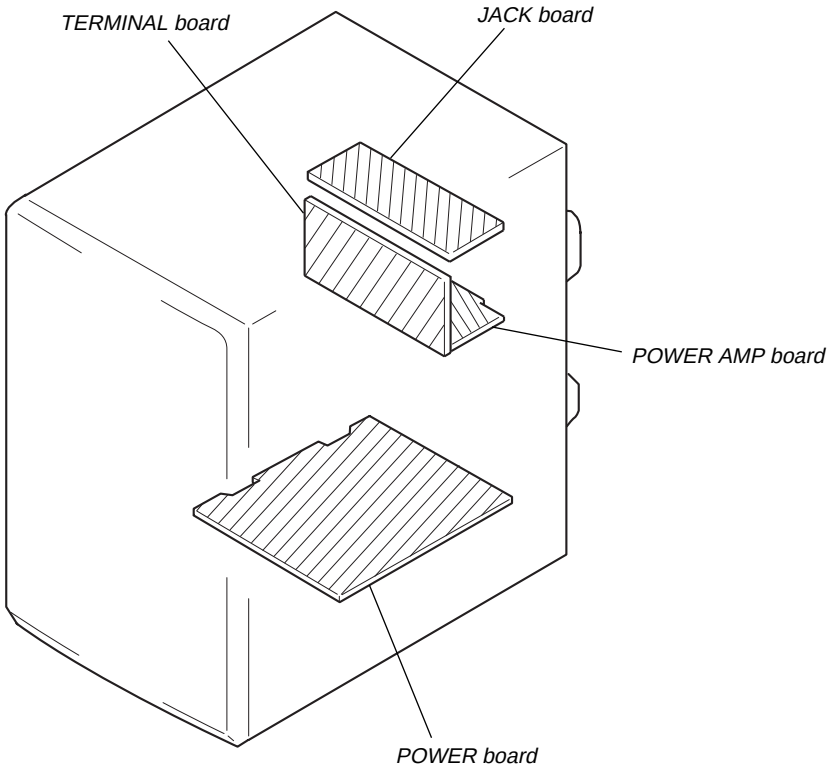
Pin No.	Pin Name	I/O	Pin Description
90	NC	—	Connected to the power supply.
91	VSS	—	Ground
92	TX	O	Crystal connection for clock oscillation. (32.768 kHz)
93	TEX	I	Crystal connection for clock oscillation. (32.768 kHz)
94	C-MUTE	O	Mute output for CD.
95	B-MUTE	O	Mute output for Tuner.
96	A-MUTE	O	Mute output for Audio.
97	ISS1	I	ISS1 switch input
98	ISS2	I	ISS2 switch input
99	T-END	I	Tape end detection input
100	NC	—	Not used. (Open)

6-2. CIRCUIT BOARDS LOCATION

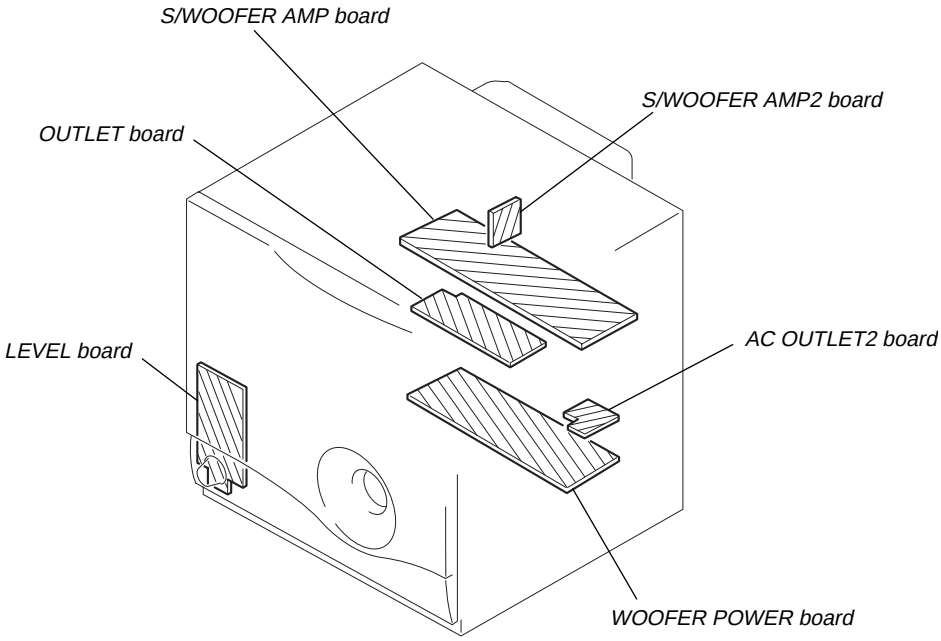
– Main Section –



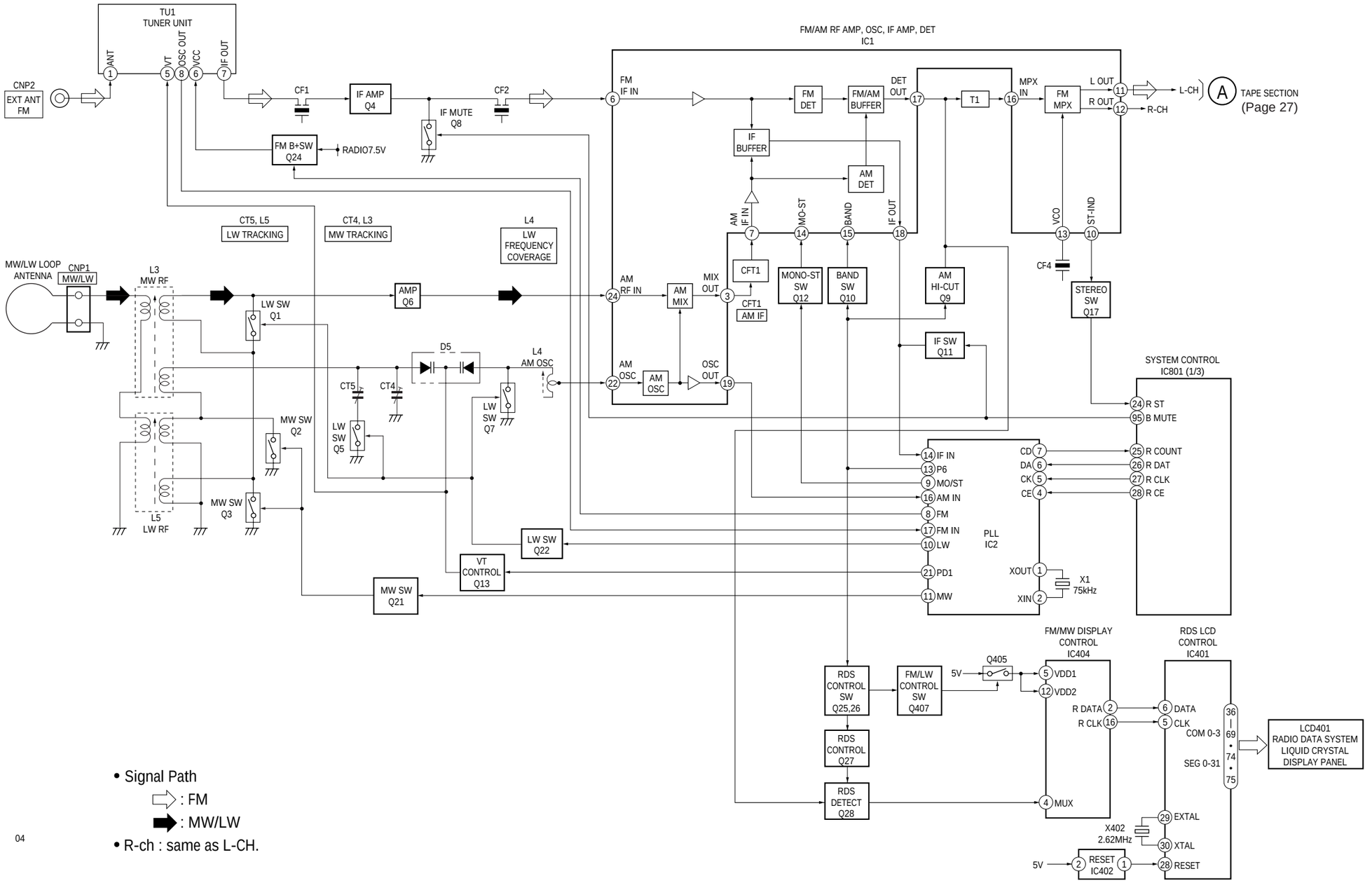
– Speaker (L) Section –



– Woofer Speaker Section –



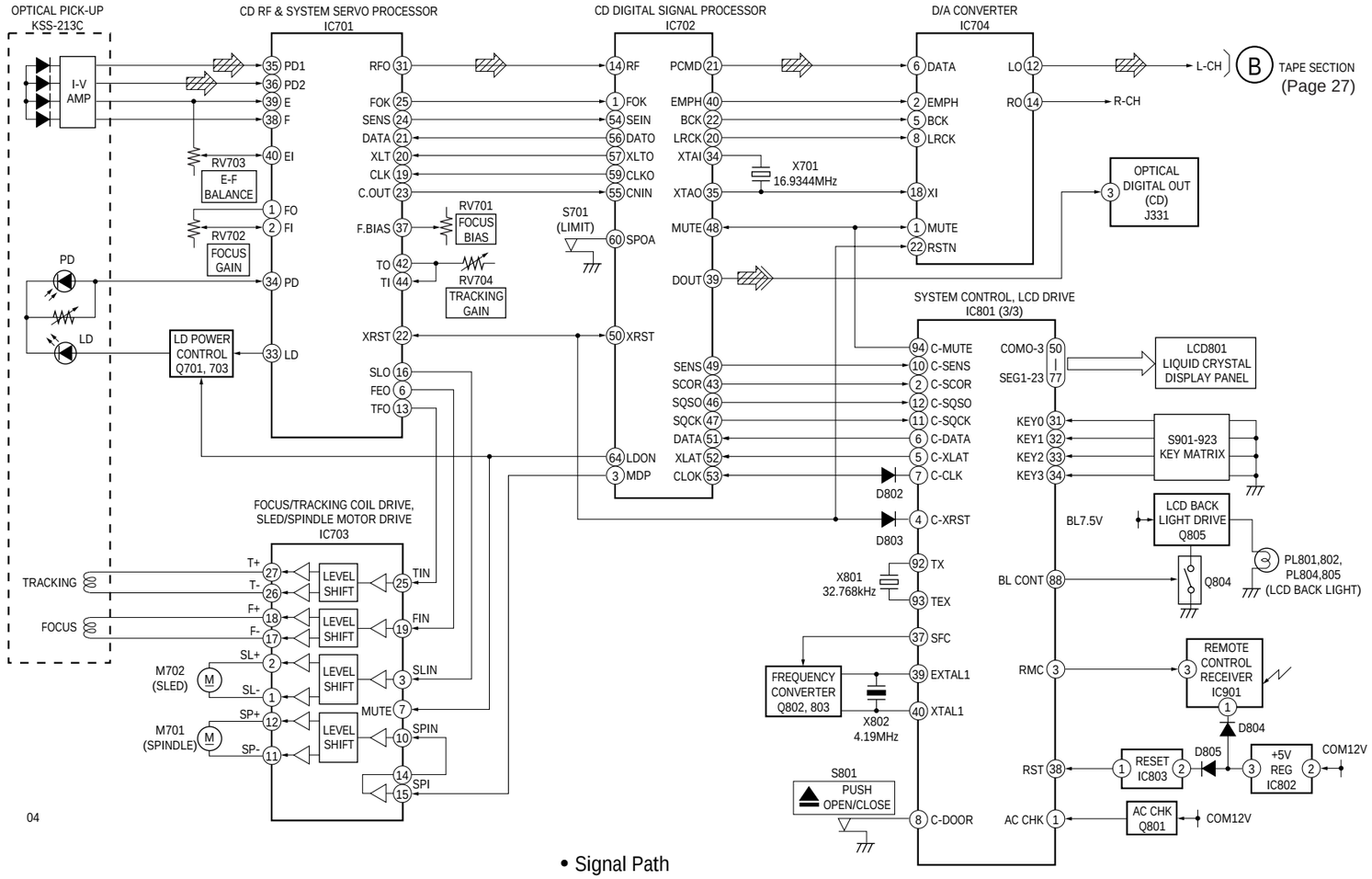
6-3. BLOCK DIAGRAM — TUNER SECTION —



- Signal Path
  - ⇨ : FM
  - ➡ : MW/LW
- R-ch : same as L-CH.

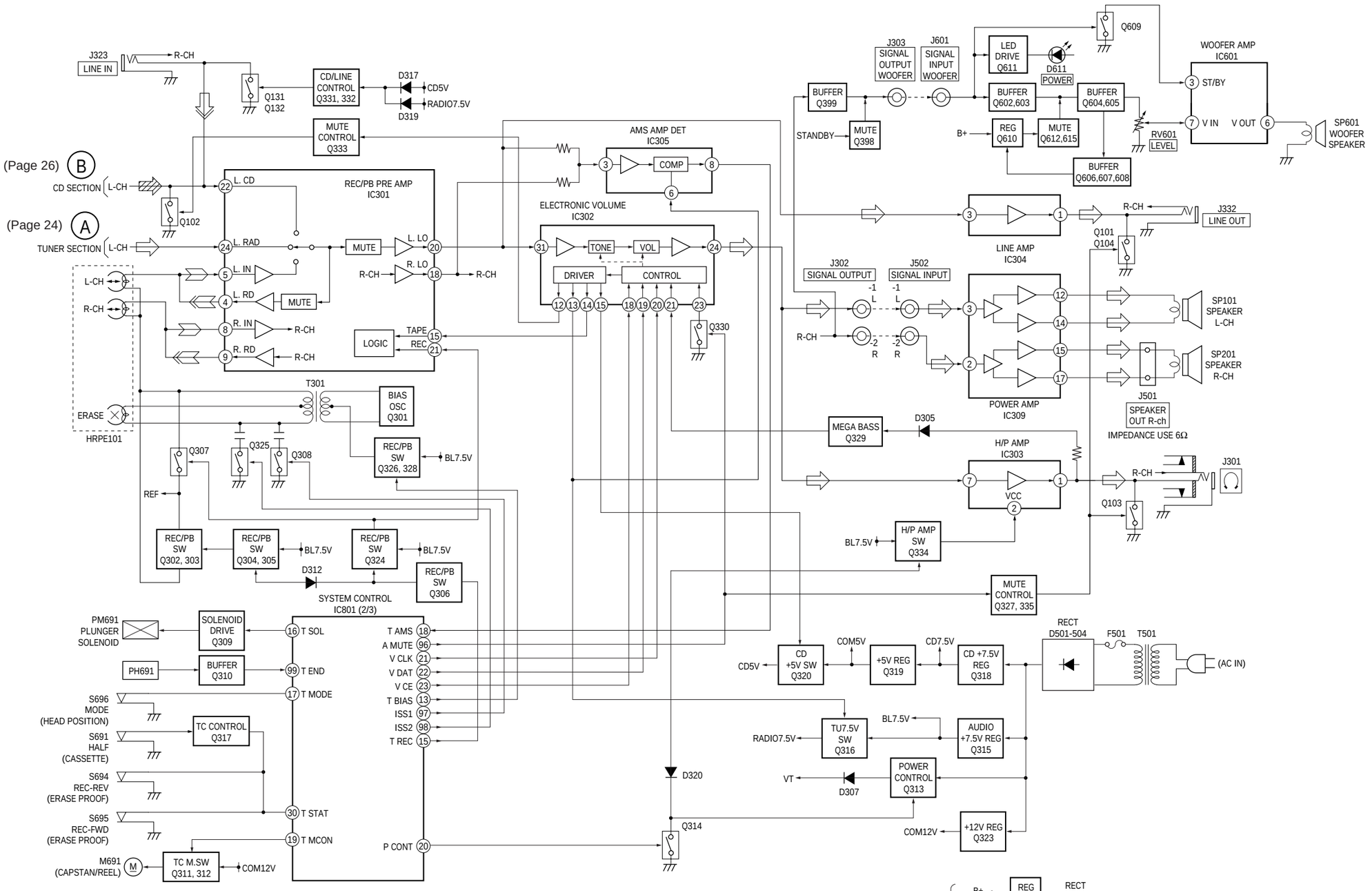
04

6-4. BLOCK DIAGRAM — CD SECTION —



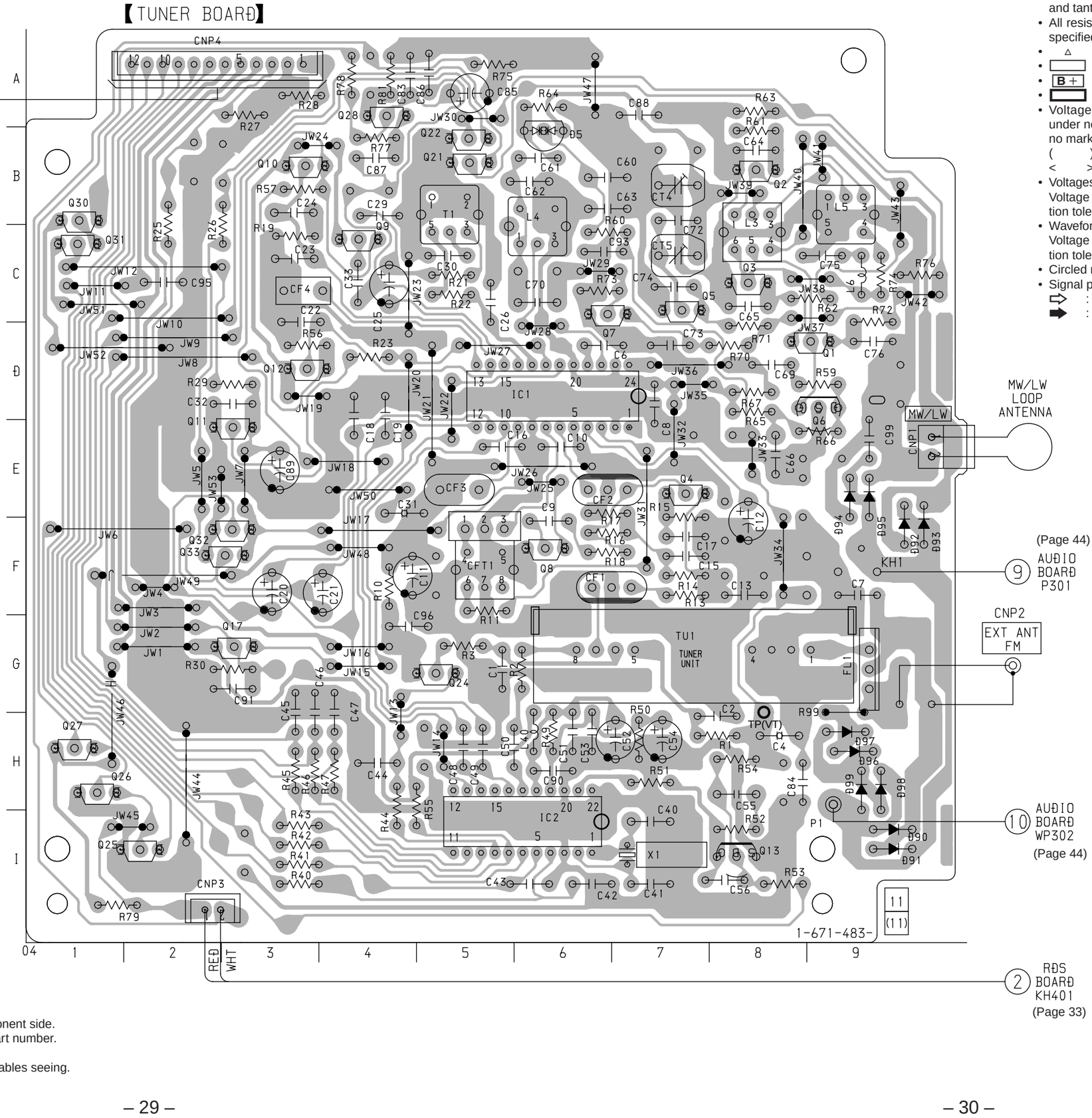
- Signal Path
  : CD
  : digital out
- R-ch : same as L-CH.

6-5. BLOCK DIAGRAM — TAPE SECTION —



- Signal Path
  - : FM
  - : TAPE (PB)
  - : TAPE (REC)
  - : LINE IN
  - : CD
- R-ch : same as L-CH.

6-6. PRINTED WIRING BOARD — TUNER SECTION — • Refer to page 21 for Circuit Boards Location.



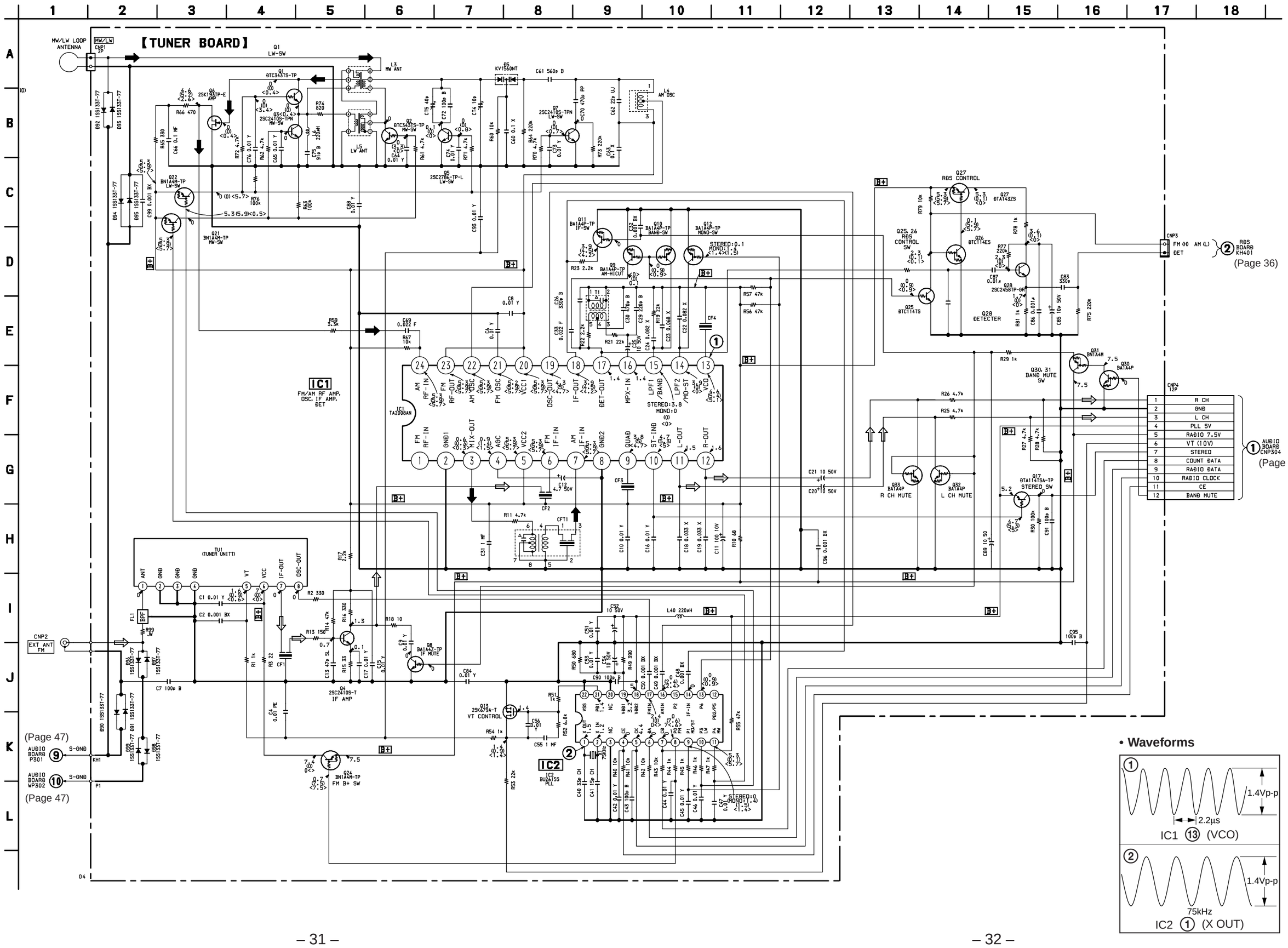
• **Semiconductor Location**

Ref. No.	Location
D5	B-6
D90	I-9
D91	I-9
D92	F-9
D93	F-9
D94	E-9
D95	E-9
D96	H-9
D97	H-9
D98	H-9
D99	H-9
IC1	E-6
IC2	H-6
Q1	D-8
Q2	B-8
Q3	C-8
Q4	E-7
Q5	C-7
Q6	D-9
Q7	C-6
Q8	F-6
Q9	C-4
Q10	B-3
Q11	E-3
Q12	D-3
Q13	I-8
Q17	G-3
Q21	B-5
Q22	B-5
Q24	G-5
Q25	I-2
Q26	H-1
Q27	H-1
Q28	A-4
Q30	B-1
Q31	C-1
Q32	F-3
Q33	F-2

Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW
  < > : LW
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW/LW

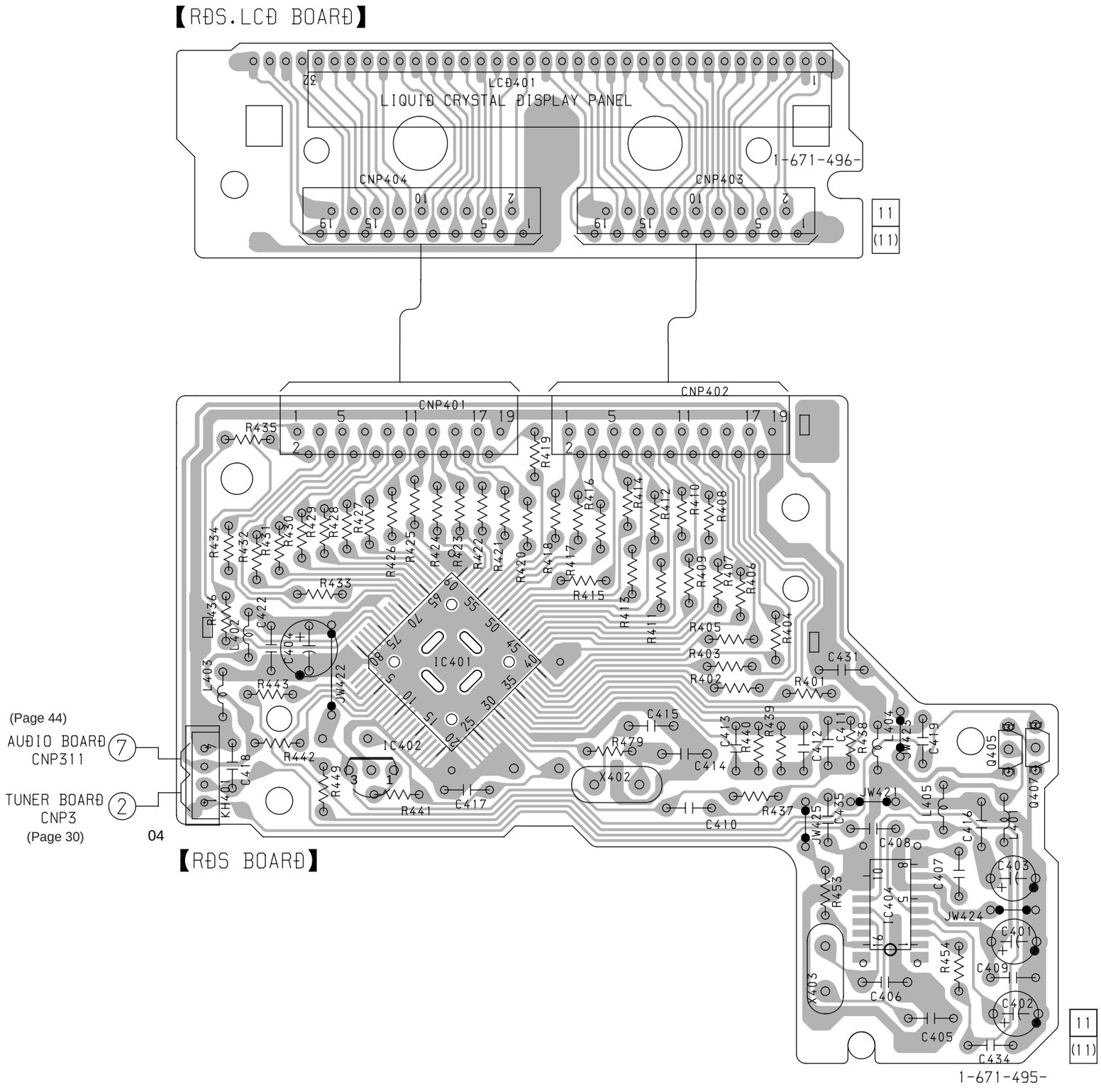
Note on Printed Wiring Boards:
- ○—— : parts extracted from the component side.
- ⊡← : indicates side identified with part number.
- △ : internal component.
- ▒▒ : Pattern from the side which enables seeing.

6-7. SCHEMATIC DIAGRAM — TUNER SECTION — • Refer to page 63 for IC Block Diagrams.



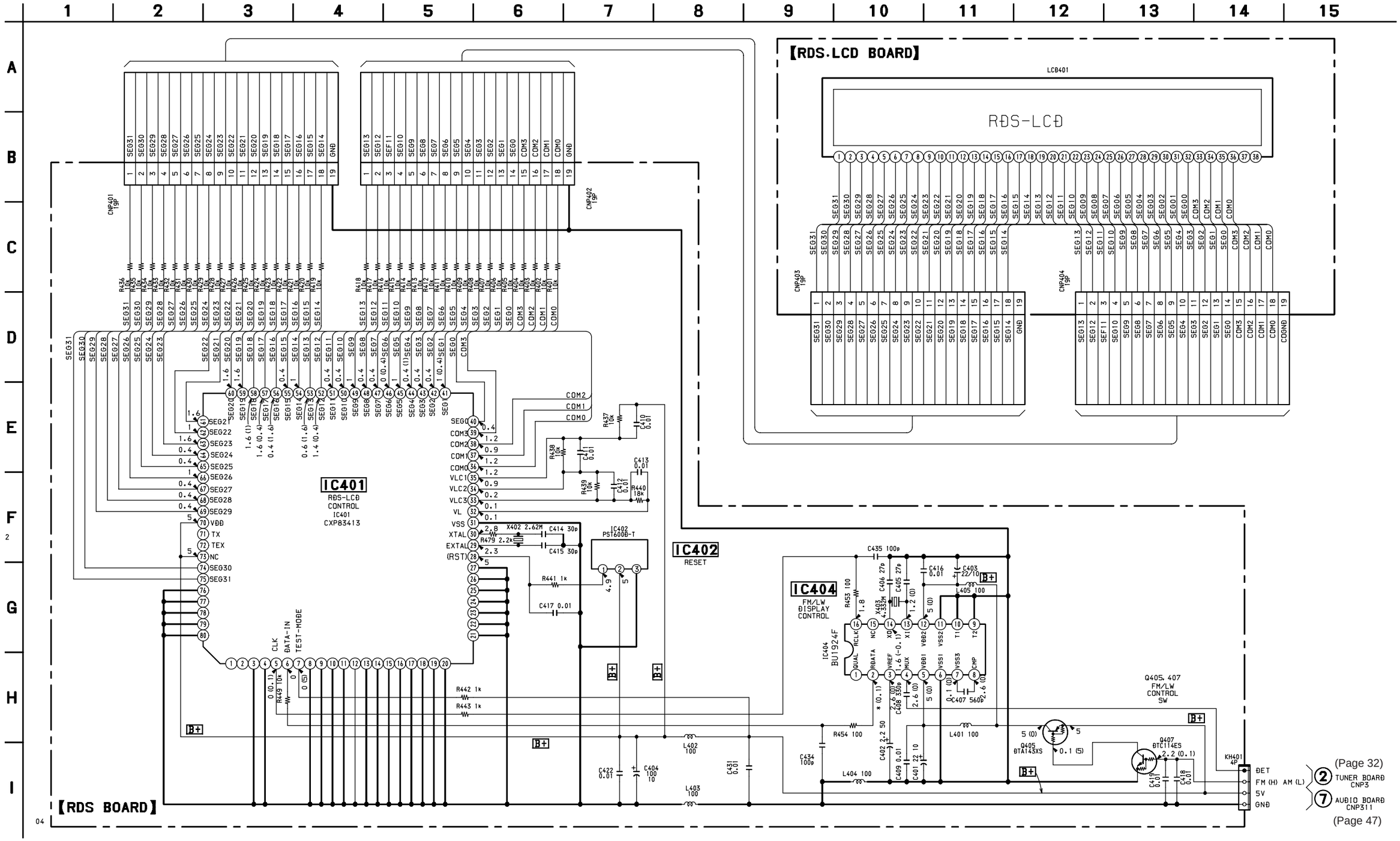
• **Waveforms**

6-8. PRINTED WIRING BOARDS — RDS SECTION — • Refer to page 21 for Circuit Boards Location.



Note:
- ○——— : parts extracted from the component side.
- ▒▒▒▒ : Pattern from the side which enables seeing.

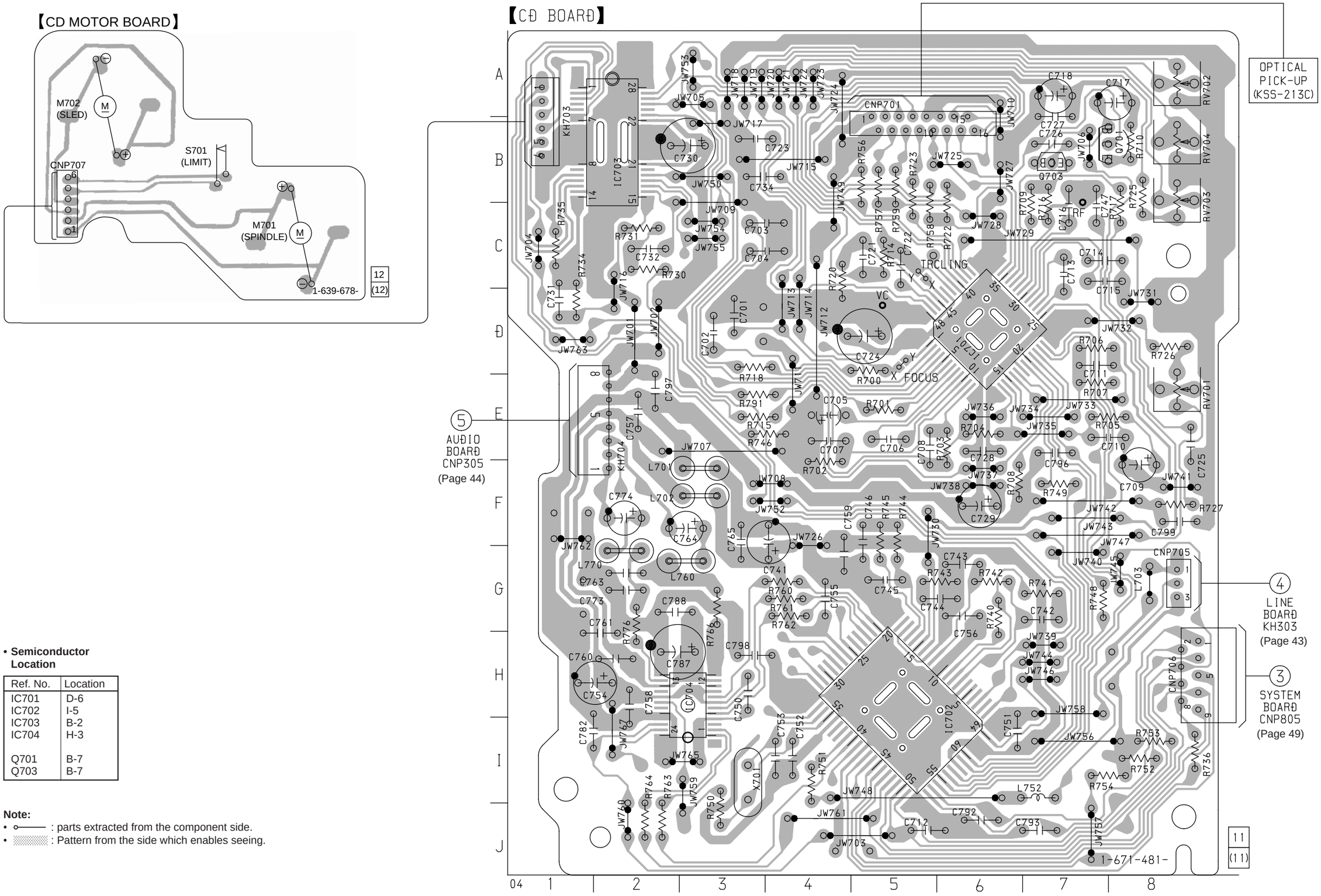
6-9. SCHEMATIC DIAGRAM — RDS SECTION — • Refer to page 64 for IC Block Diagrams.



Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line.
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : MW
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

6-10. PRINTED WIRING BOARDS — CD SECTION — • Refer to page 21 for Circuit Boards Location.

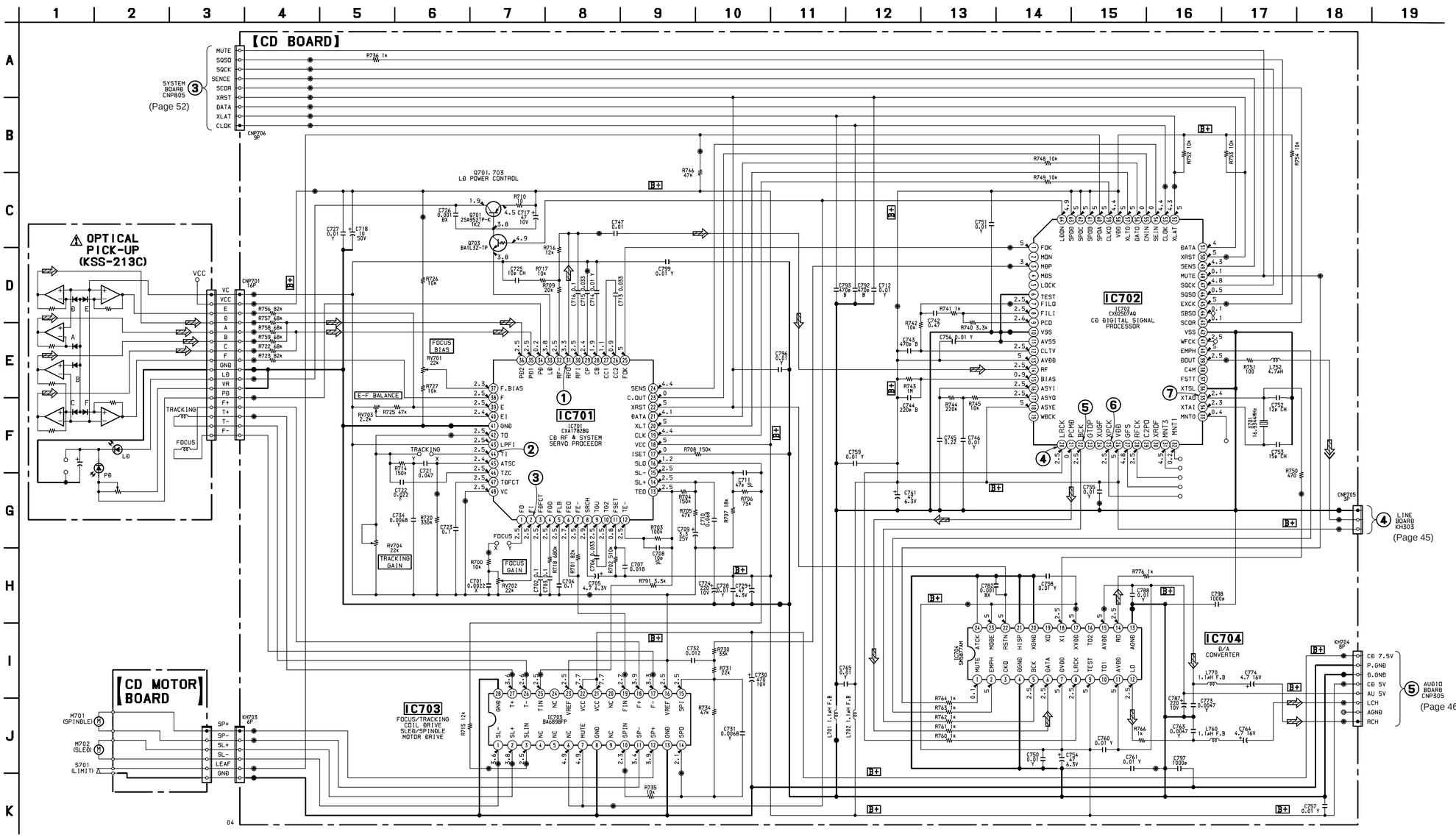


- **Semiconductor Location**

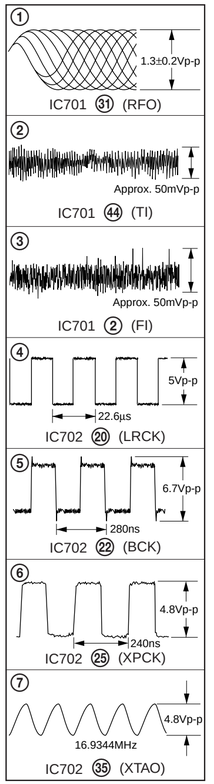
Ref. No.	Location
IC701	D-6
IC702	I-5
IC703	B-2
IC704	H-3
Q701	B-7
Q703	B-7

Note:
- ⟜——: parts extracted from the component side.
- ▒▒▒: Pattern from the side which enables seeing.

6-11. SCHEMATIC DIAGRAM — CD SECTION — • Refer to page 65 for IC Block Diagrams.



• **Waveforms**



Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : CD STOP
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD
  ⇨ : digital out

6-12. PRINTED WIRING BOARDS — MAIN SECTION —

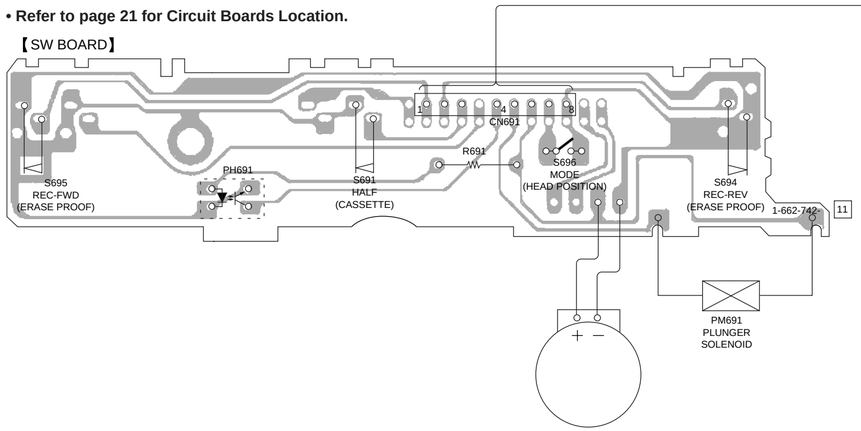
• Refer to page 21 for Circuit Boards Location.

• **Semiconductor Location**

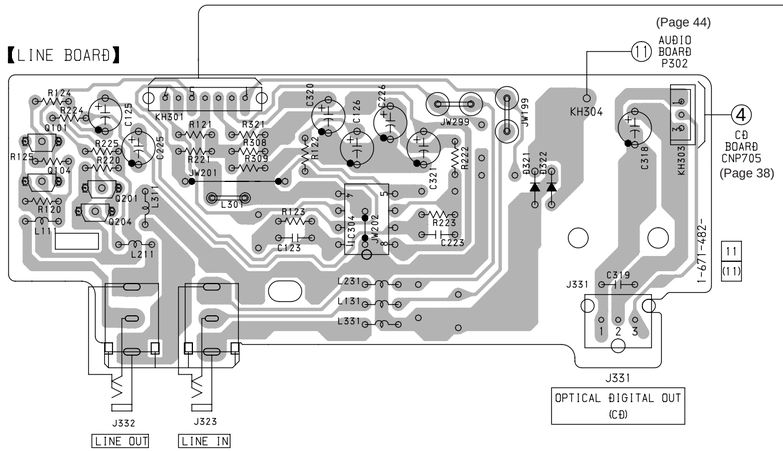
Ref. No.	Location
D301	H-7
D302	B-7
D304	C-5
D305	E-9
D307	A-7
D308	B-11
D309	C-10
D310	C-9
D311	B-9
D312	F-7
D313	B-9
D314	I-9
D315	B-8
D316	B-7
D317	D-5
D318	F-9
D319	D-8
D320	C-11
IC301	H-6
IC302	H-11
IC303	E-10
IC305	I-1
Q102	G-4
Q103	D-11
Q131	G-3
Q132	H-3
Q202	G-3
Q203	D-11
Q231	F-3
Q232	F-3
Q301	E-6
Q302	F-4
Q303	F-5
Q304	F-8
Q305	F-7
Q306	F-7
Q307	F-4
Q308	E-3
Q309	C-4
Q310	C-3
Q311	C-7
Q312	B-7
Q313	C-10
Q314	C-11
Q316	D-8
Q317	B-6
Q319	C-8
Q320	E-7
Q323	C-8
Q324	F-9
Q325	E-4
Q326	F-8
Q327	D-2
Q328	E-8
Q329	I-9
Q330	J-12
Q331	C-2
Q332	C-3
Q333	D-5
Q334	E-10
Q335	E-2
Q398	C-12
Q399	C-12

Note:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.

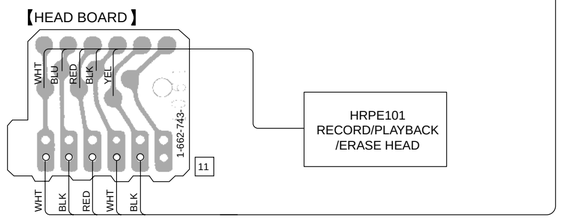
【SW BOARD】



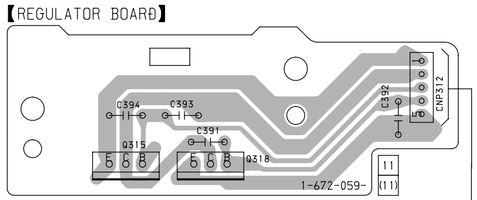
【LINE BOARD】



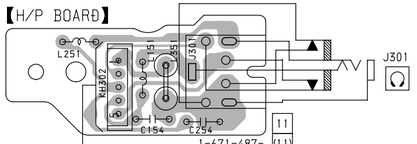
【HEAD BOARD】



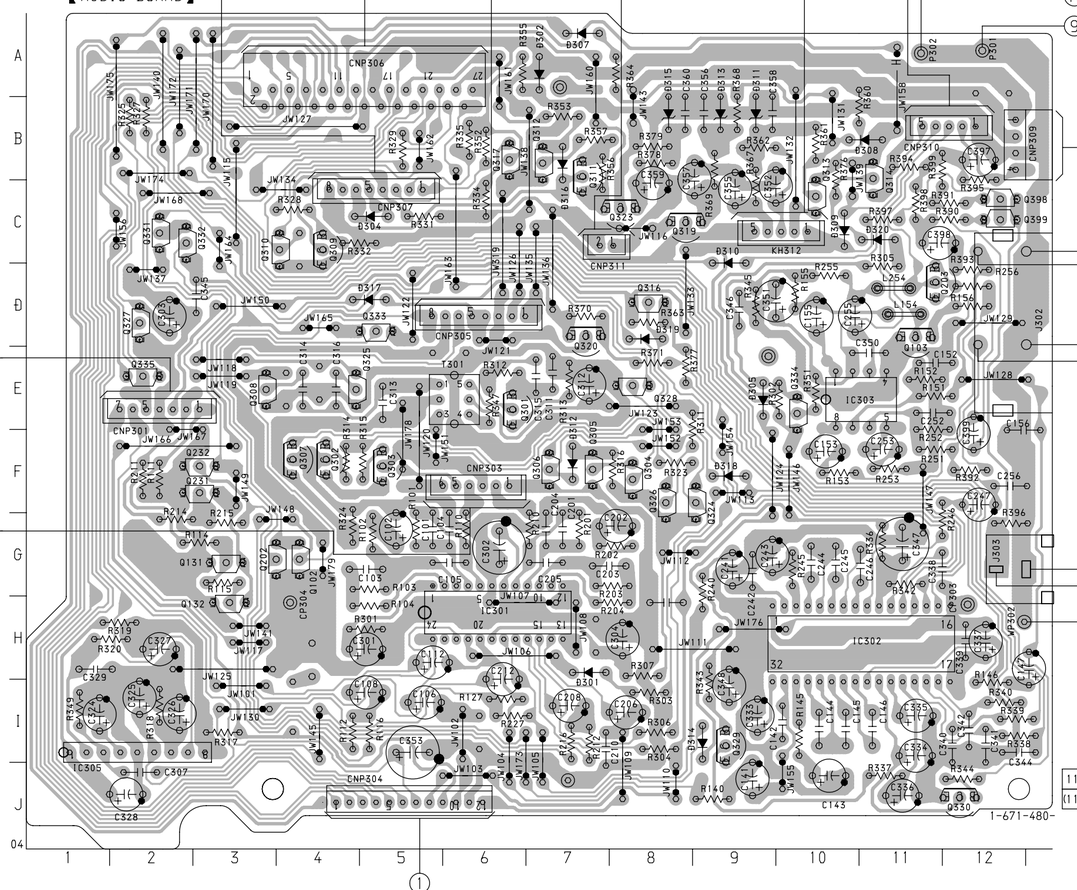
【REGULATOR BOARD】



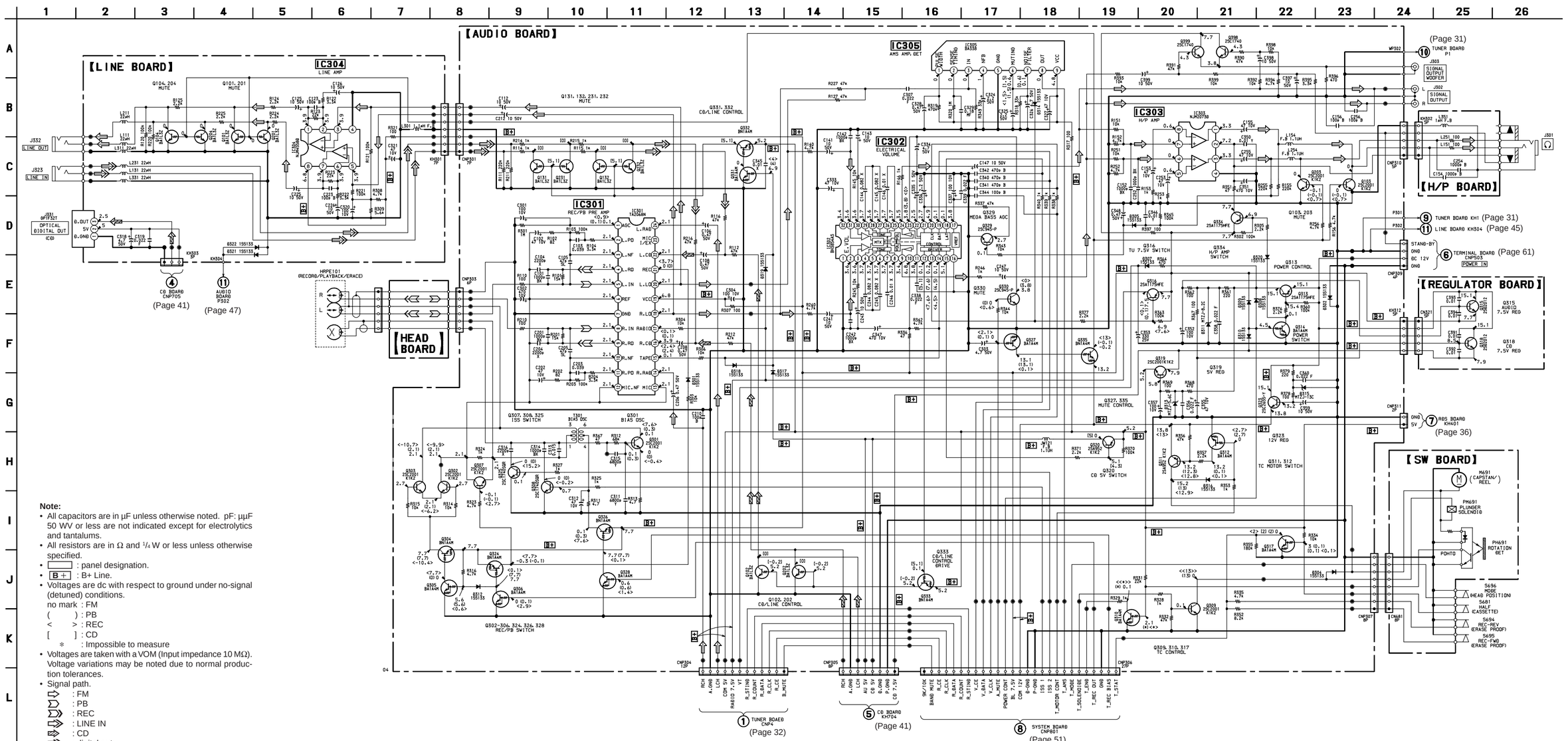
【H/P BOARD】



【AUDIO BOARD】



6-13. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 64 for IC Block Diagrams.



Note:

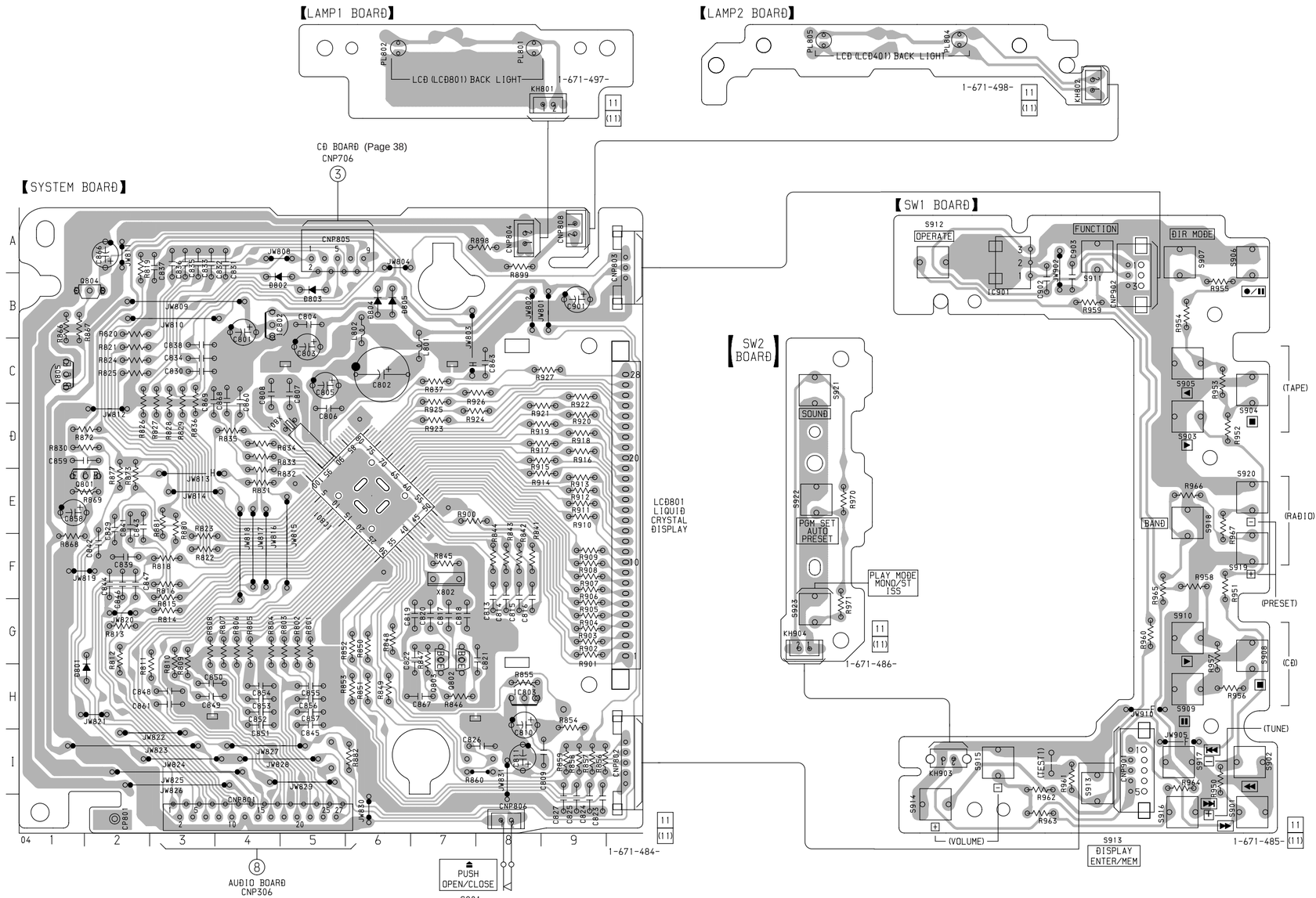
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PB
  < > : REC
  [ ] : CD
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇨ : PB
  ⇨ : REC
  ⇨ : LINE IN
  ⇨ : CD
  ⇨ : digital out

6-14. PRINTED WIRING BOARDS — CONTROL SECTION — • Refer to page 21 for Circuit Boards Location.

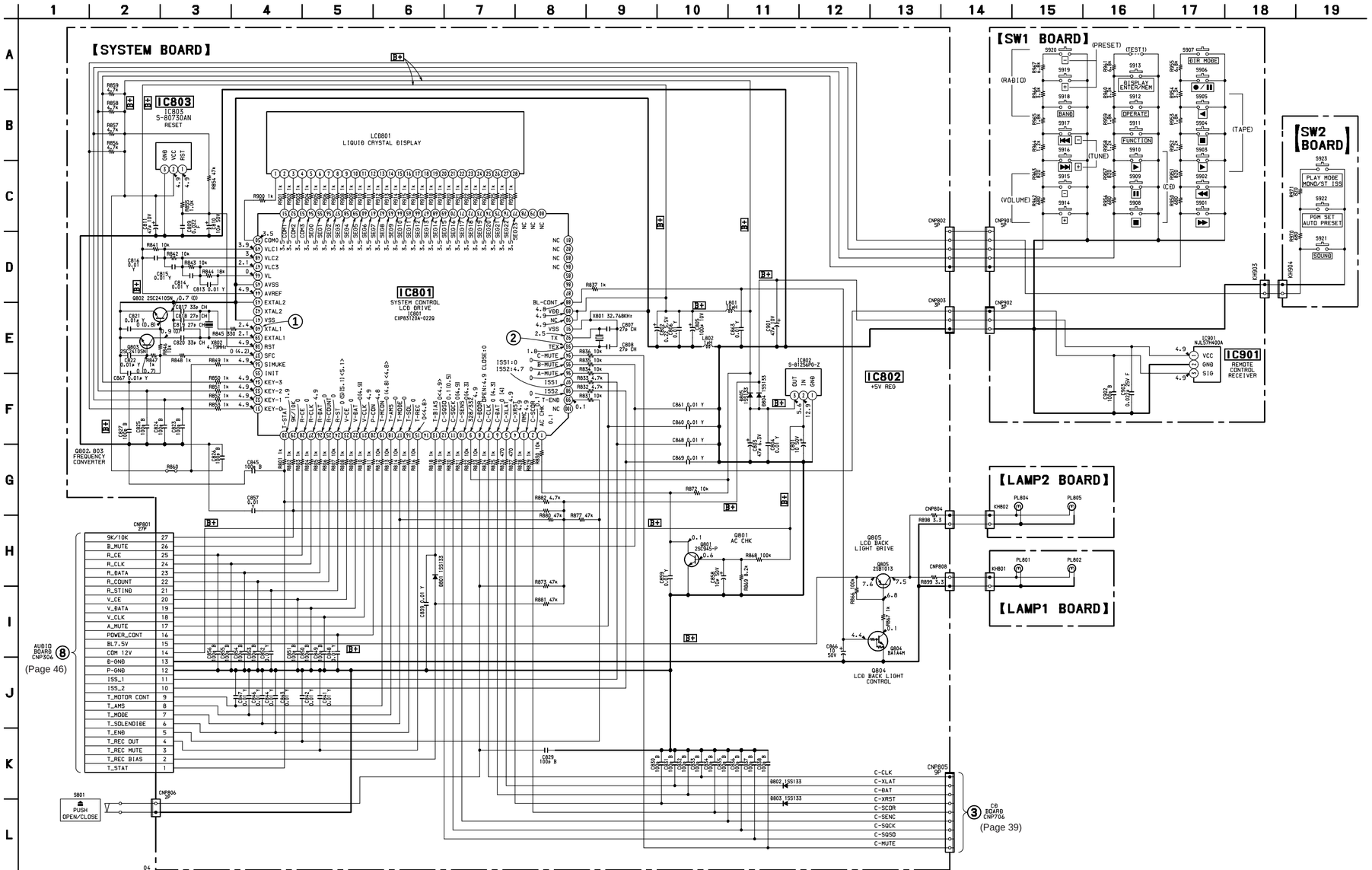
• **Semiconductor Location**

Ref. No.	Location
D801	H-2
D802	B-4
D803	B-5
D804	B-6
D805	B-6
IC801	E-5
IC802	B-4
IC803	H-8
Q801	E-2
Q802	G-7
Q803	G-7
Q804	B-2
Q805	C-1

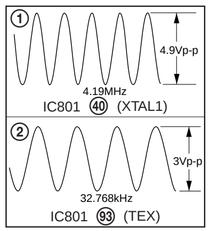
Note:
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.



6-15. SCHEMATIC DIAGRAM — CONTROL SECTION —



• **Waveforms**



Note:

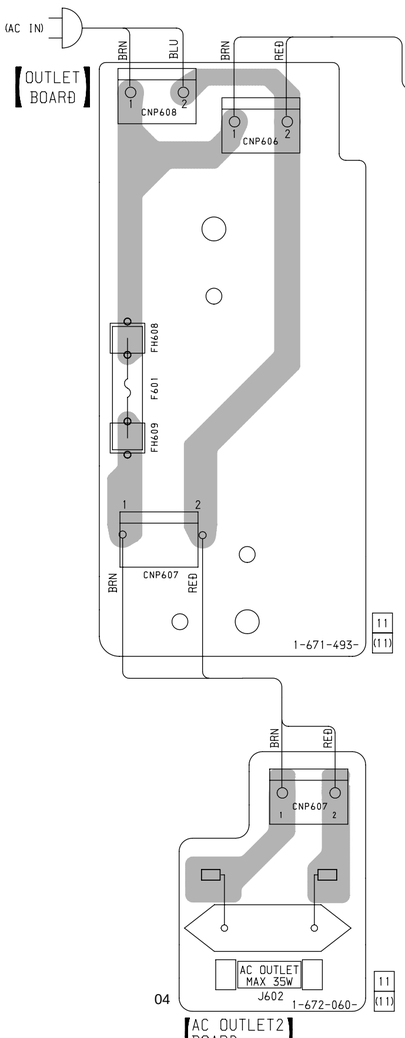
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- [ ] : panel designation.
- [B+] : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PB
  < > : REC
  [ ] : CD
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

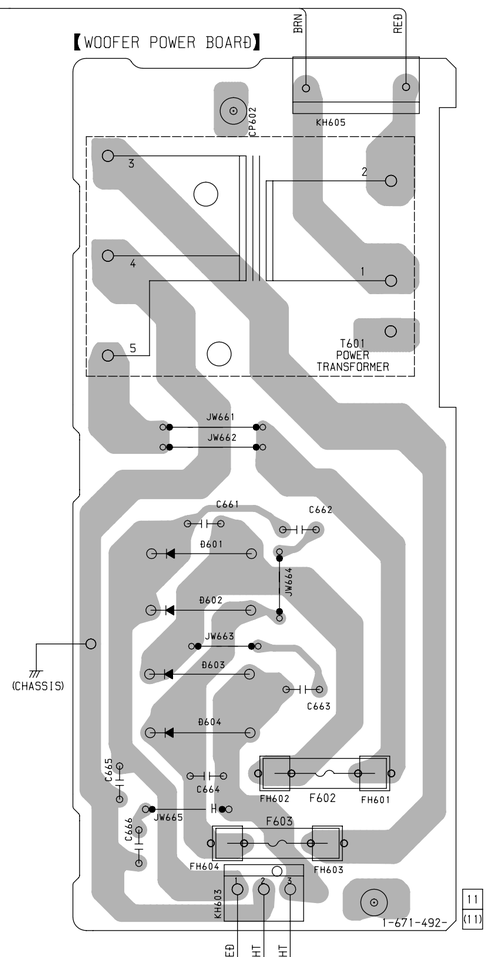
6-16. PRINTED WIRING BOARDS — WOOFER SPEAKER SECTION — • Refer to page 22 for Circuit Boards Location.

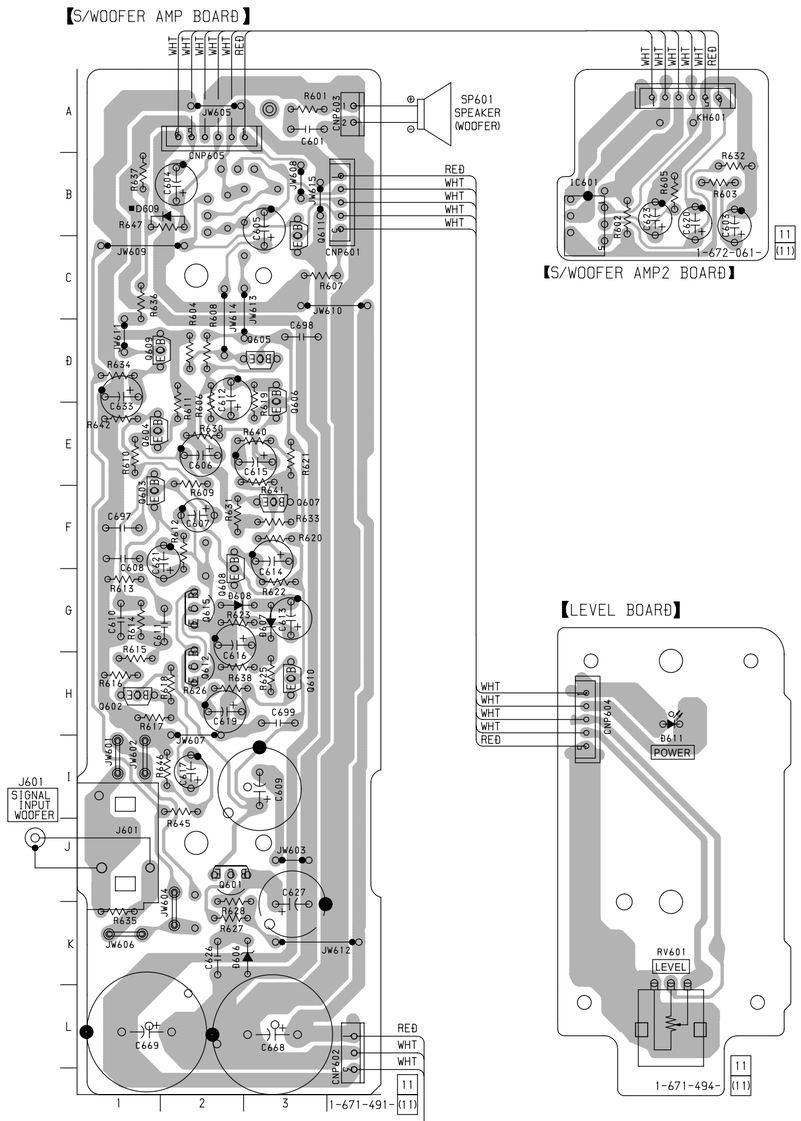
• Semiconductor Location

Ref. No.	Location
D606	K-3
D607	G-3
D608	G-3
D609	B-1
Q601	J-2
Q602	H-1
Q603	F-1
Q604	E-2
Q605	D-3
Q606	E-3
Q607	F-3
Q608	G-2
Q609	D-2
Q610	H-3
Q611	C-3
Q612	H-2
Q615	G-2

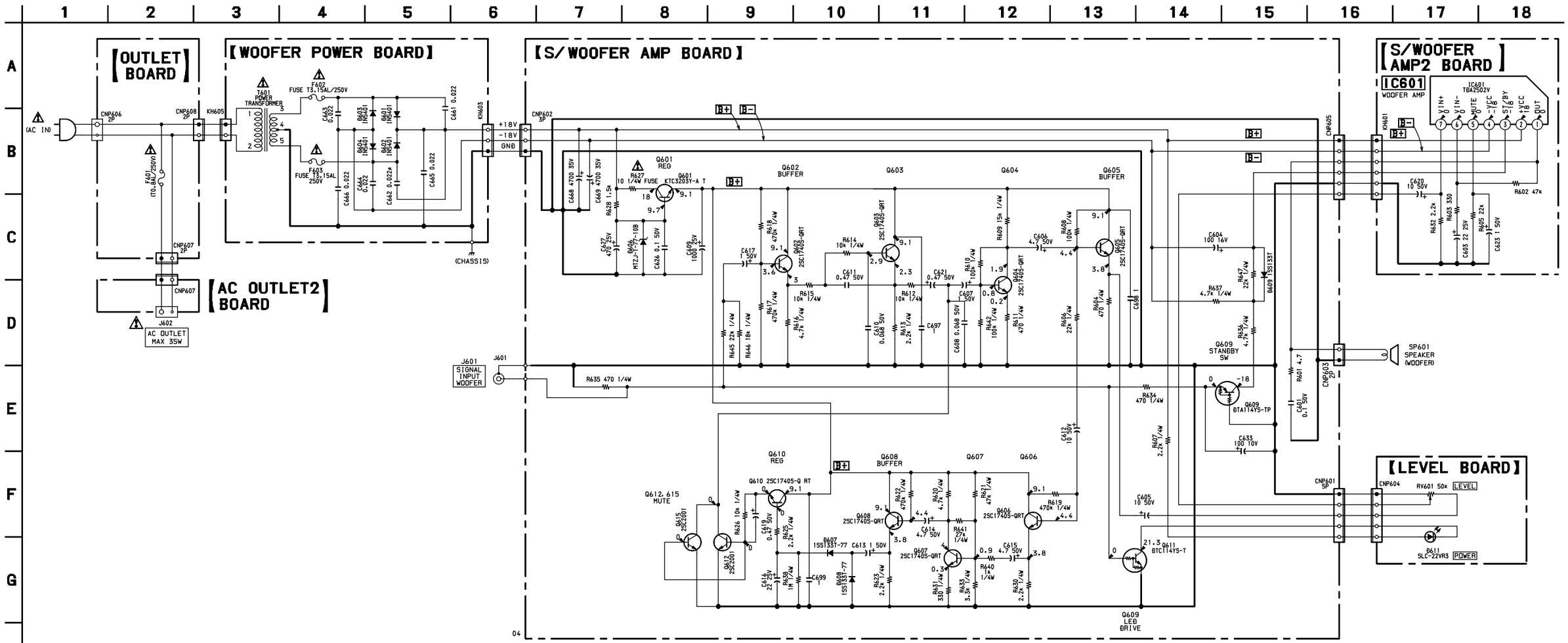
Note:
- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.







6-17. SCHEMATIC DIAGRAM — WOOFER SPEAKER SECTION — • Refer to page 64 for IC Block Diagrams.



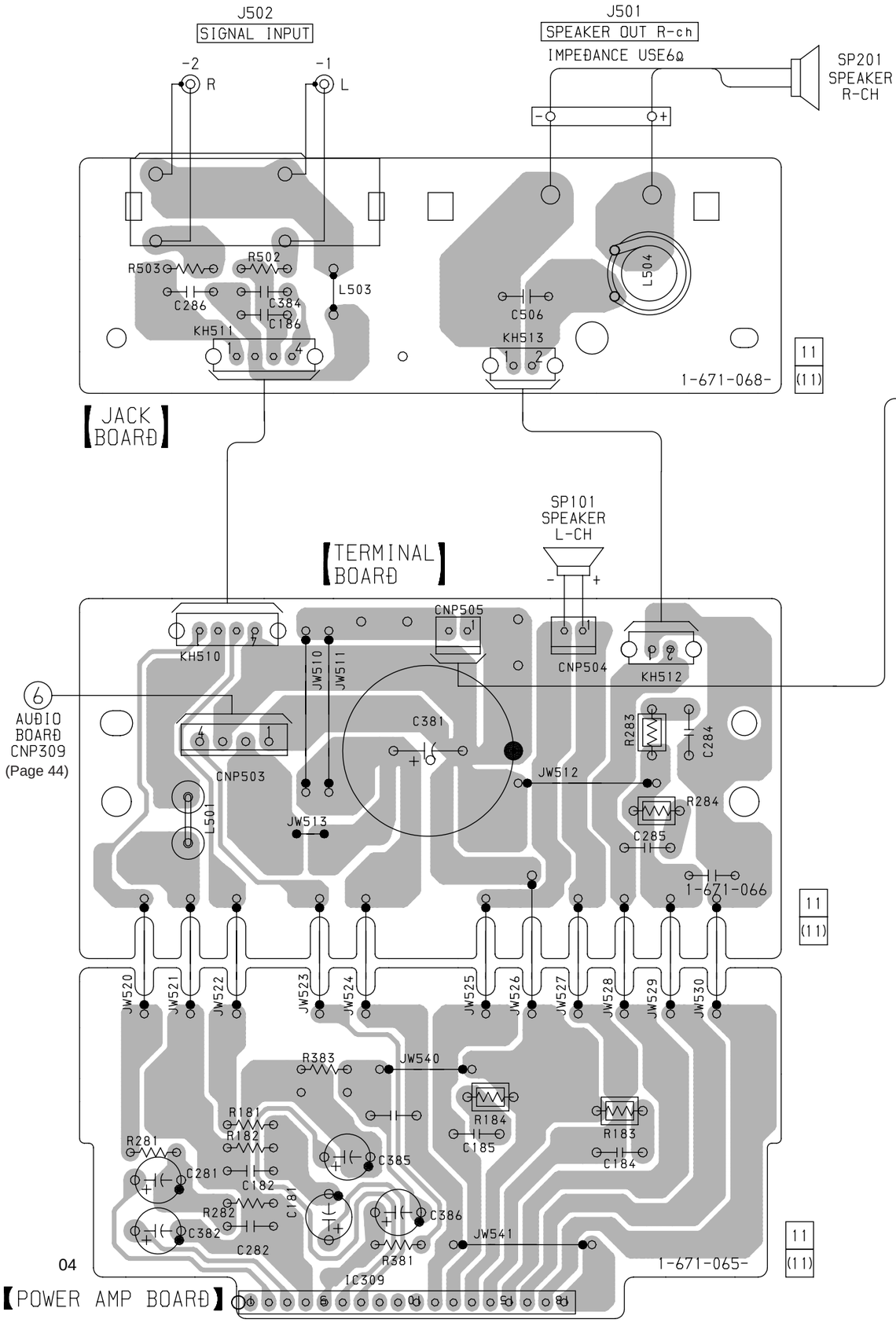
Note:

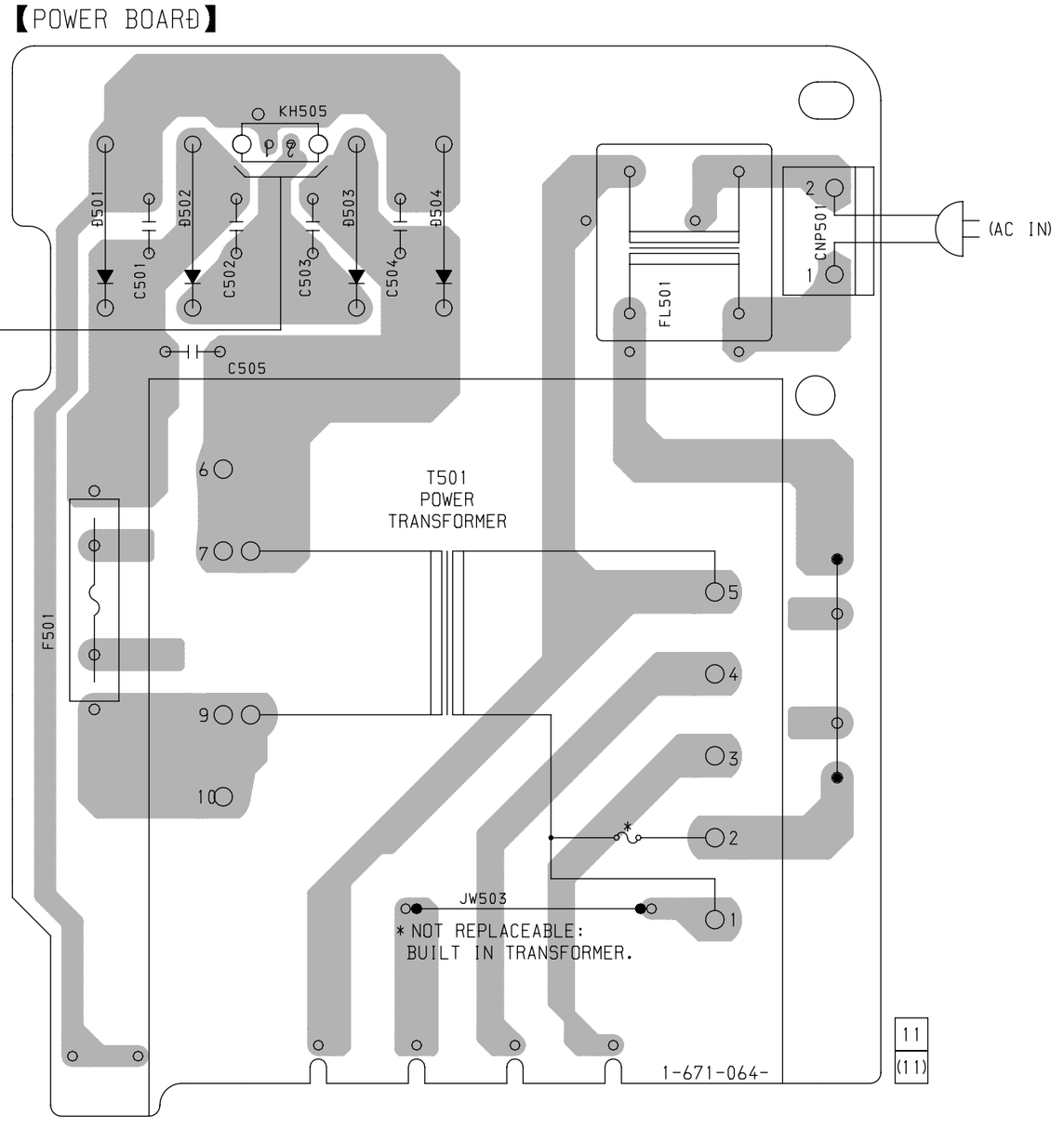
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- Voltages and waveforms are dc with respect to ground in playback mode.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

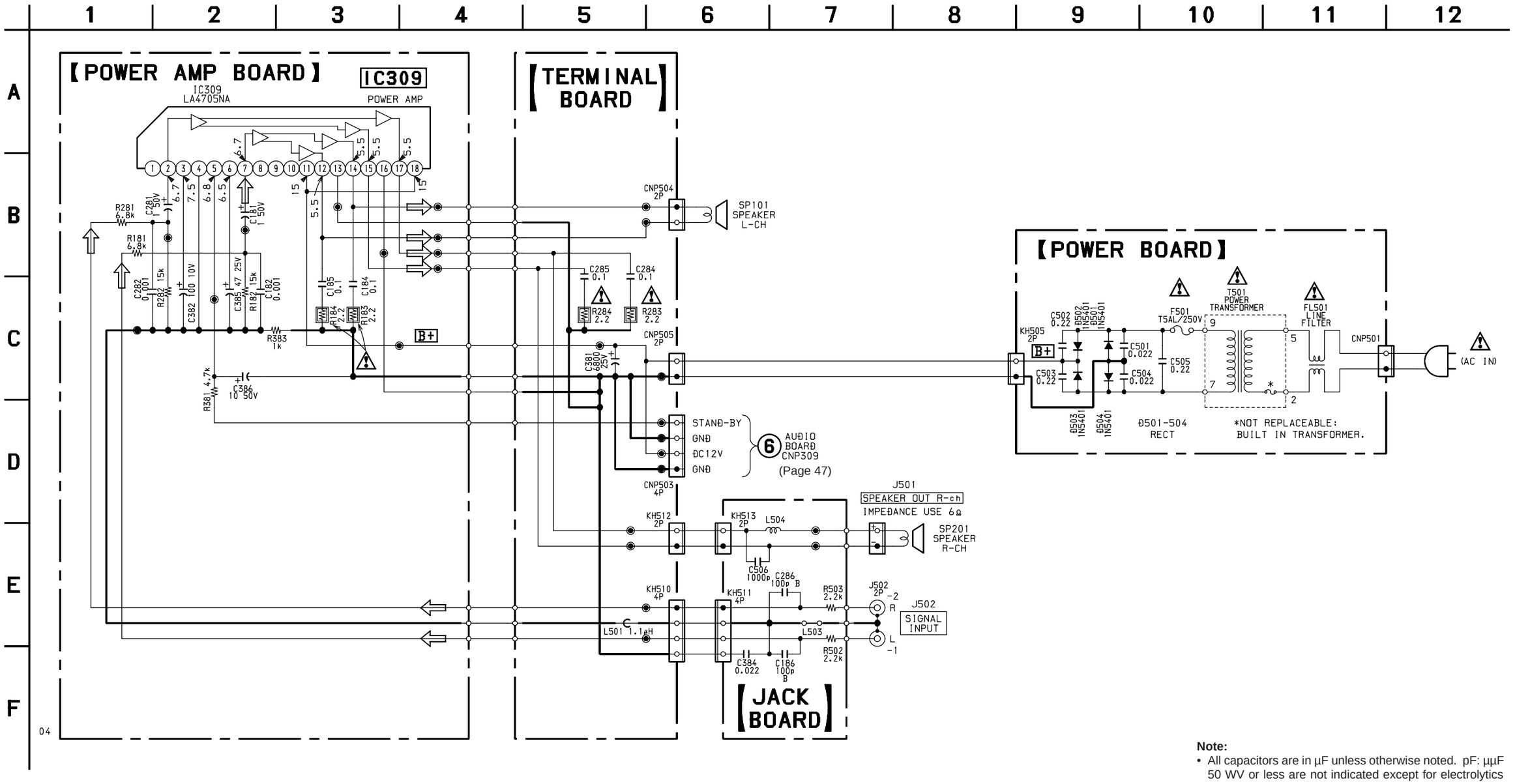
6-18. PRINTED WIRING BOARDS — POWER AMPLIFIER SECTION — • Refer to page 22 for Circuit Boards Location.





Note:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

6-19. SCHEMATIC DIAGRAM — POWER AMPLIFIER SECTION —



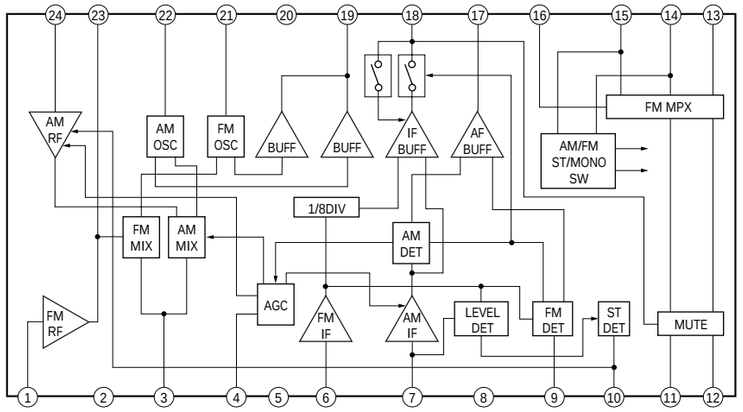
Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ⎓ : nonflammable resistor.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

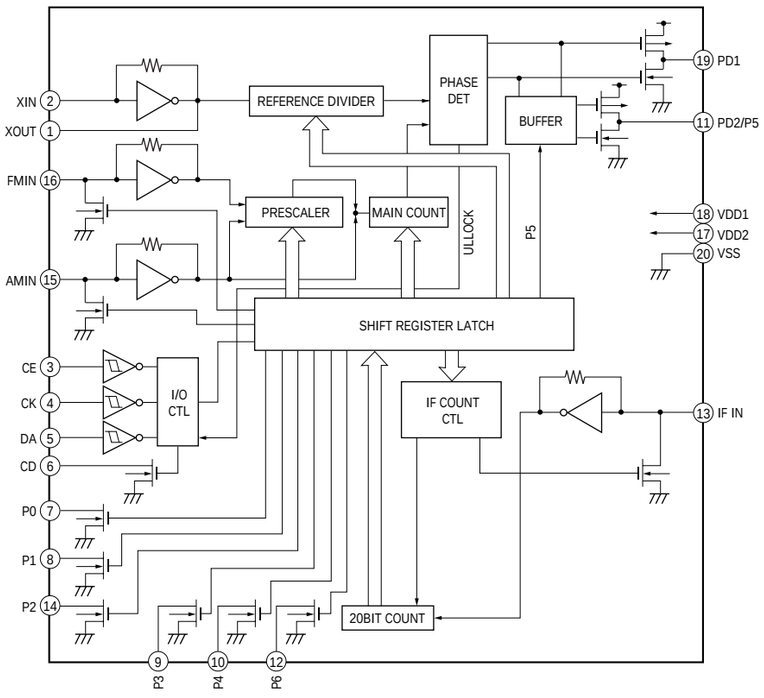
- B+ : B+ Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM

• **IC Block Diagrams**

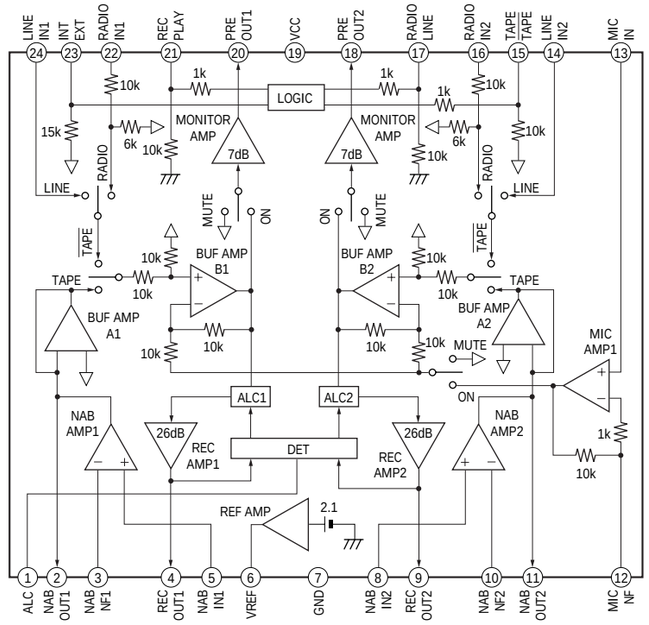
IC1 TA2008AN



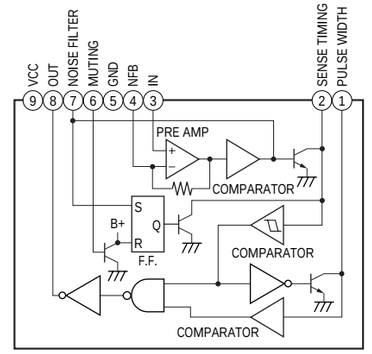
IC2 BU2615S



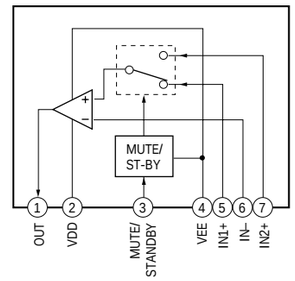
IC301 TA2068N



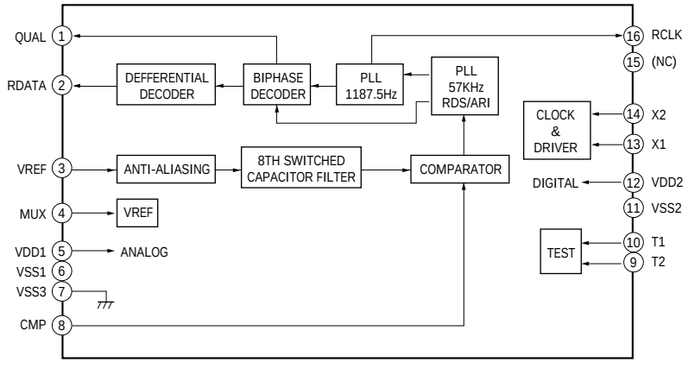
IC305 BA338



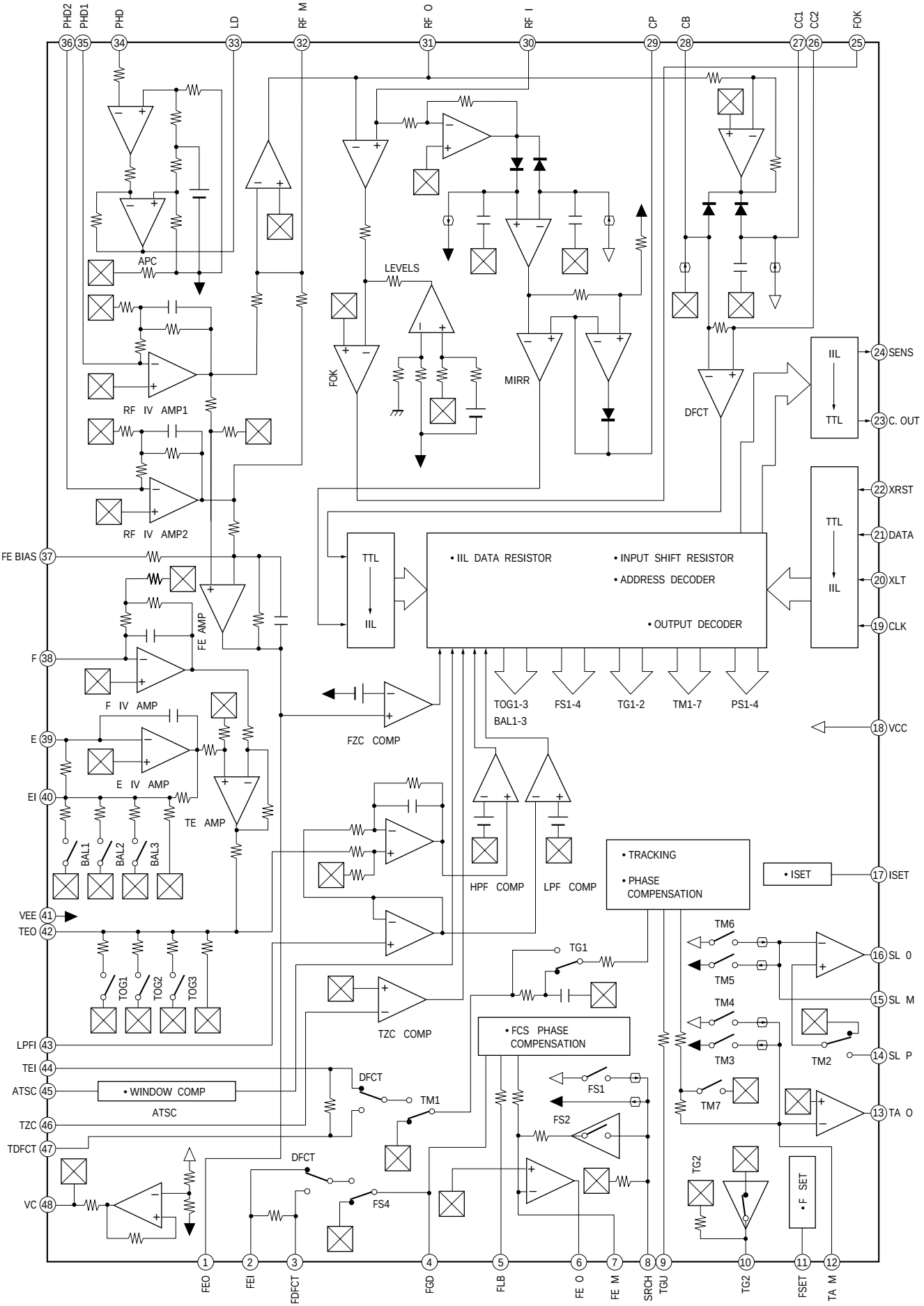
IC601 TDA2052V



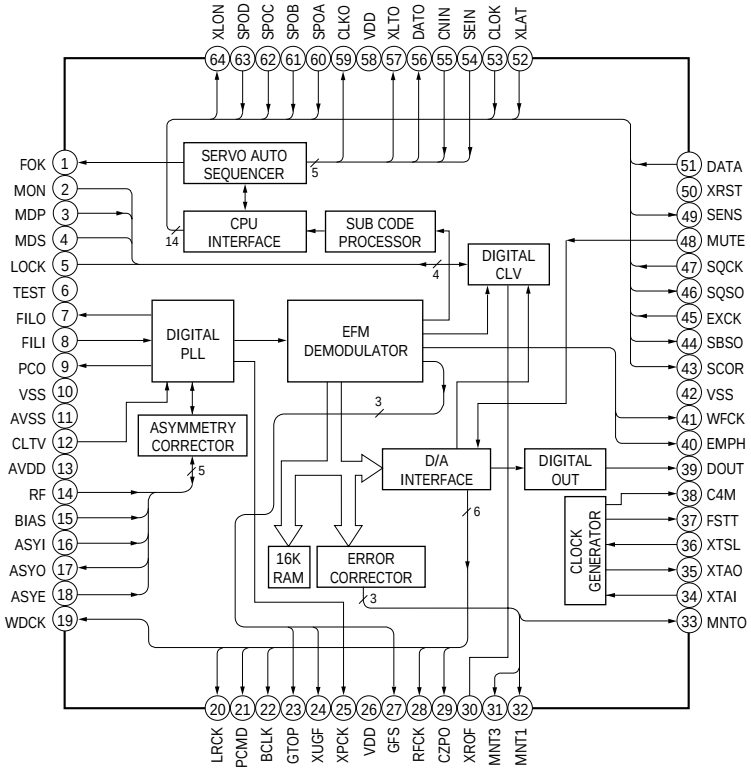
IC404 BU1924F



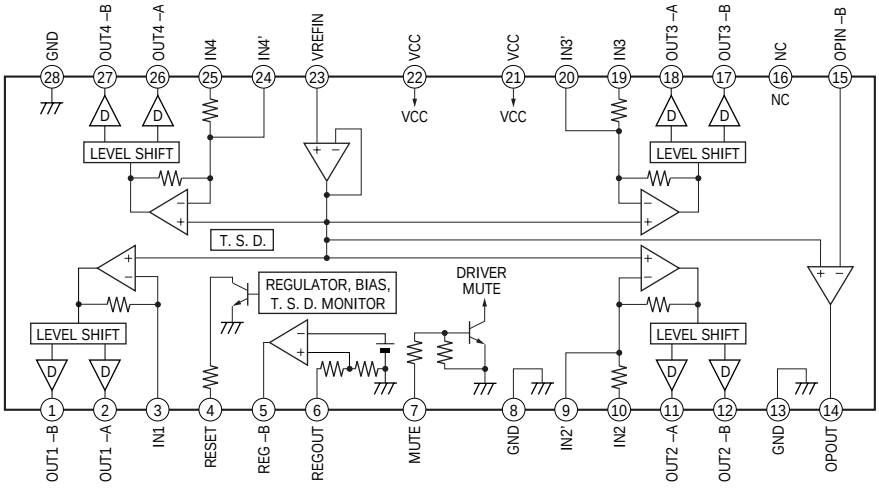
IC701 CXA1782BQ



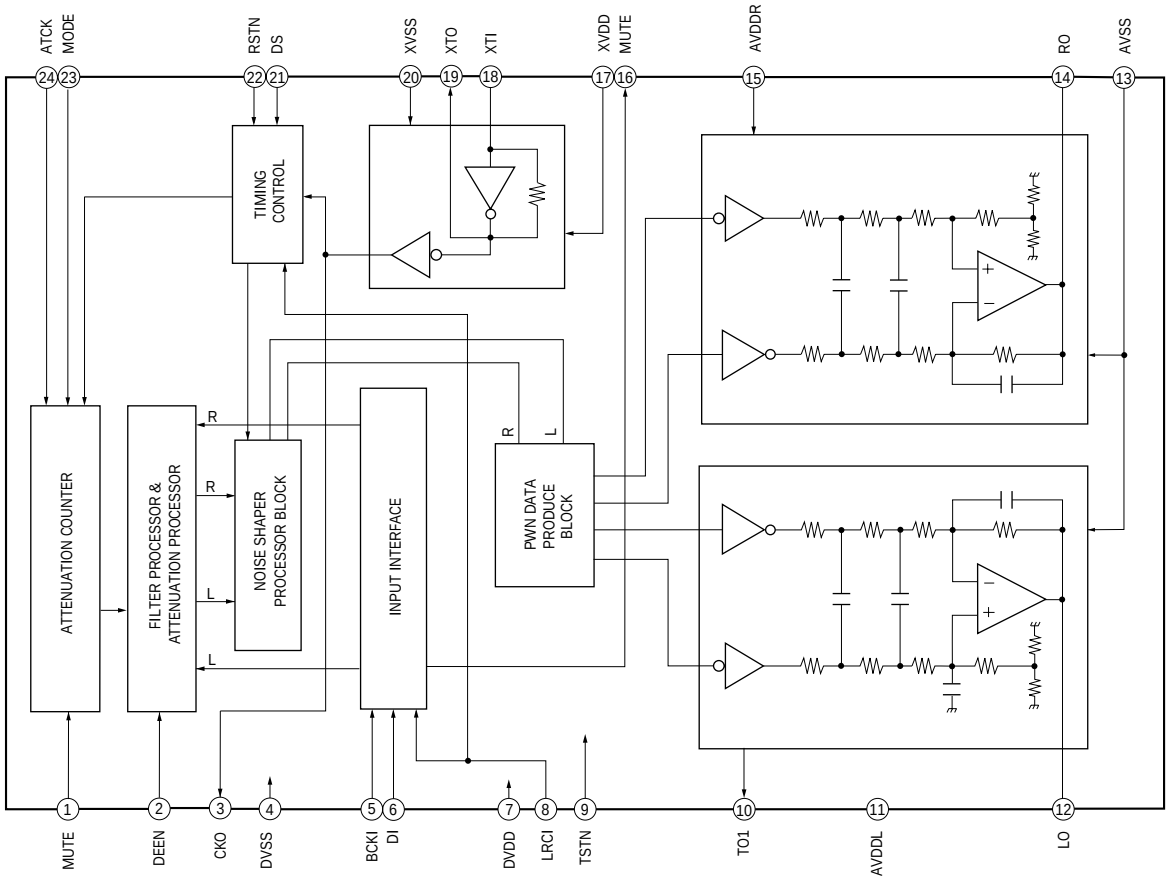
IC702 CXD2507AQ



IC703 BA6898FP


GND OUT4 –B OUT4 –A IN4 IN4' VREFIN VCC VCC IN3' IN3 OUT3 –A OUT3 –B NC OPIN –B
28 27 26 25 24 23 22 21 20 19 18 17 16 15
VCC VCC NC
D
LEVEL SHIFT
T. S. D.
REGULATOR, BIAS, T. S. D. MONITOR
DRIVER MUTE
1 2 3 4 5 6 7 8 9 10 11 12 13 14
OUT1 –B OUT1 –A IN1 RESET REG –B REGOUT MUTE GND IN2' IN2 OUT2 –A OUT2 –B GND OPOUT

IC704 SM5877AM



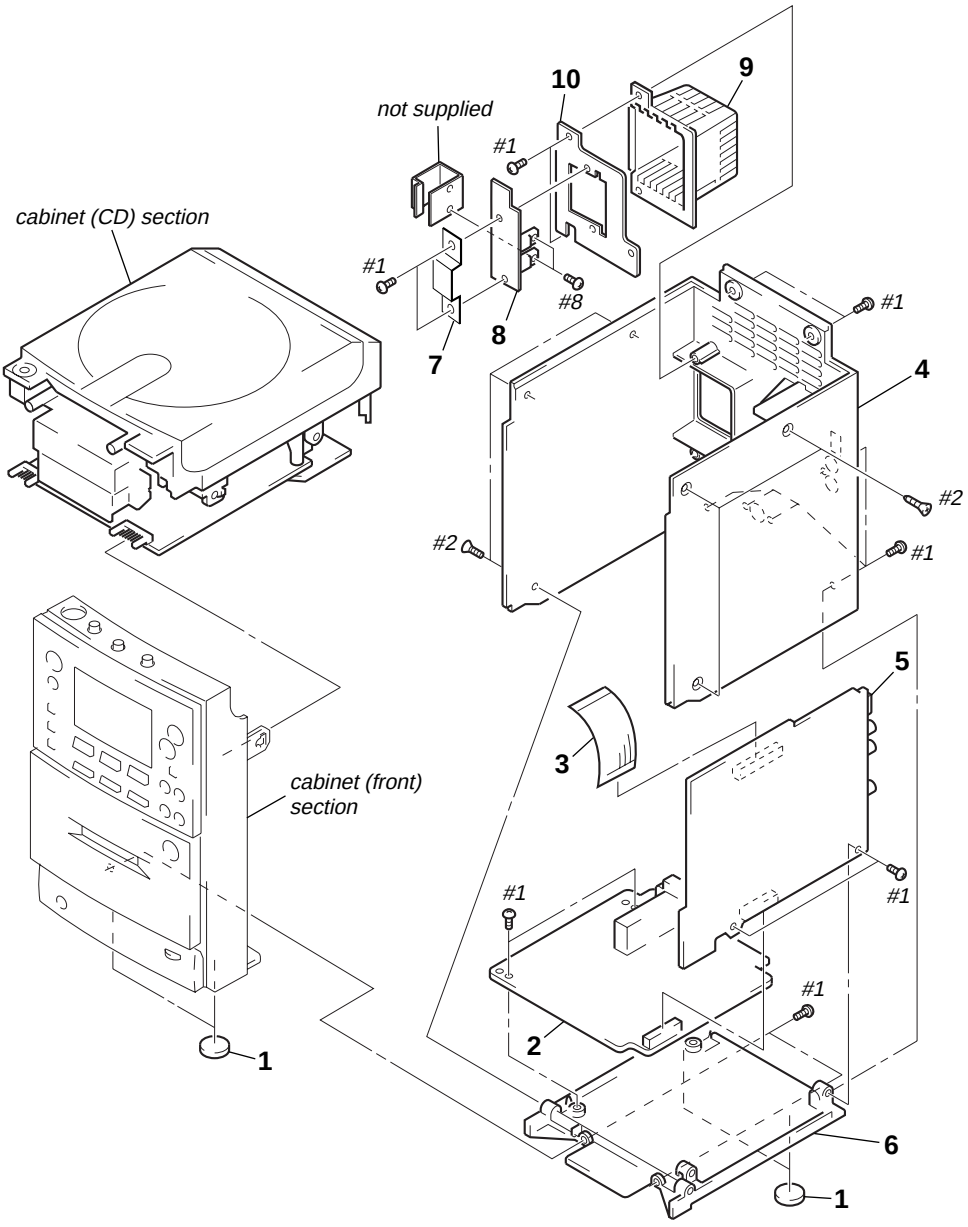
SECTION 7
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
  G : German model
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

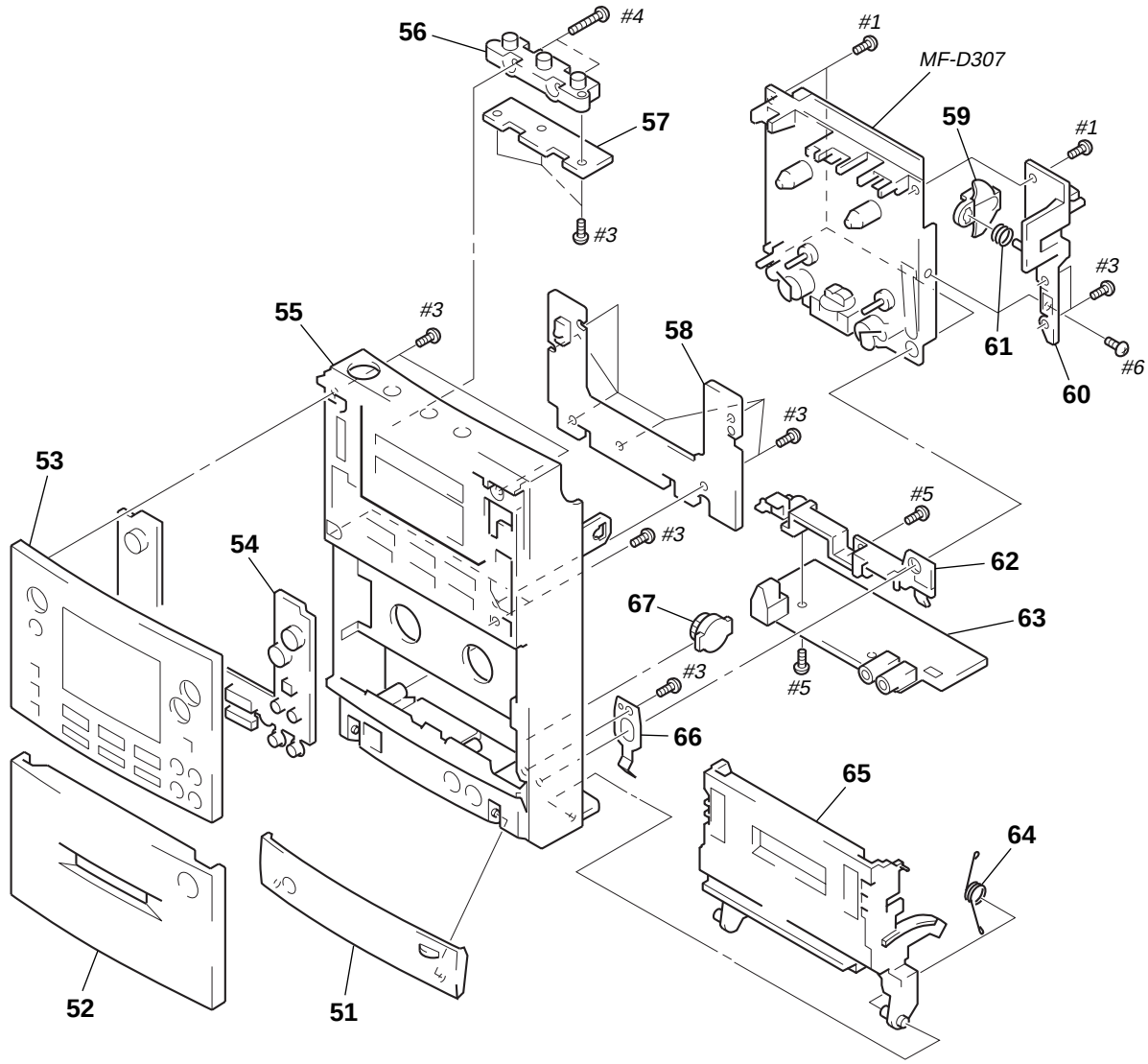
The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

7-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	3-014-503-01	FOOT	
* 2	A-3321-585-A	TUNER BOARD, COMPLETE	
3	1-782-296-11	WIRE, PARALLEL (FFC) (27 CORE)	
4	3-014-125-01	CABINET (REAR)	
* 5	A-3321-586-A	AUDIO BOARD, COMPLETE	
6	3-014-127-01	CASE (LOWER)	
7	3-031-341-01	SHEET, INSULATING (MAIN)	
* 8	1-672-059-11	REGULATOR BOARD	
* 9	3-031-261-01	COVER (MAIN), HEAT SINK	
* 10	3-031-262-01	BRACKET (HEAT SINK)	

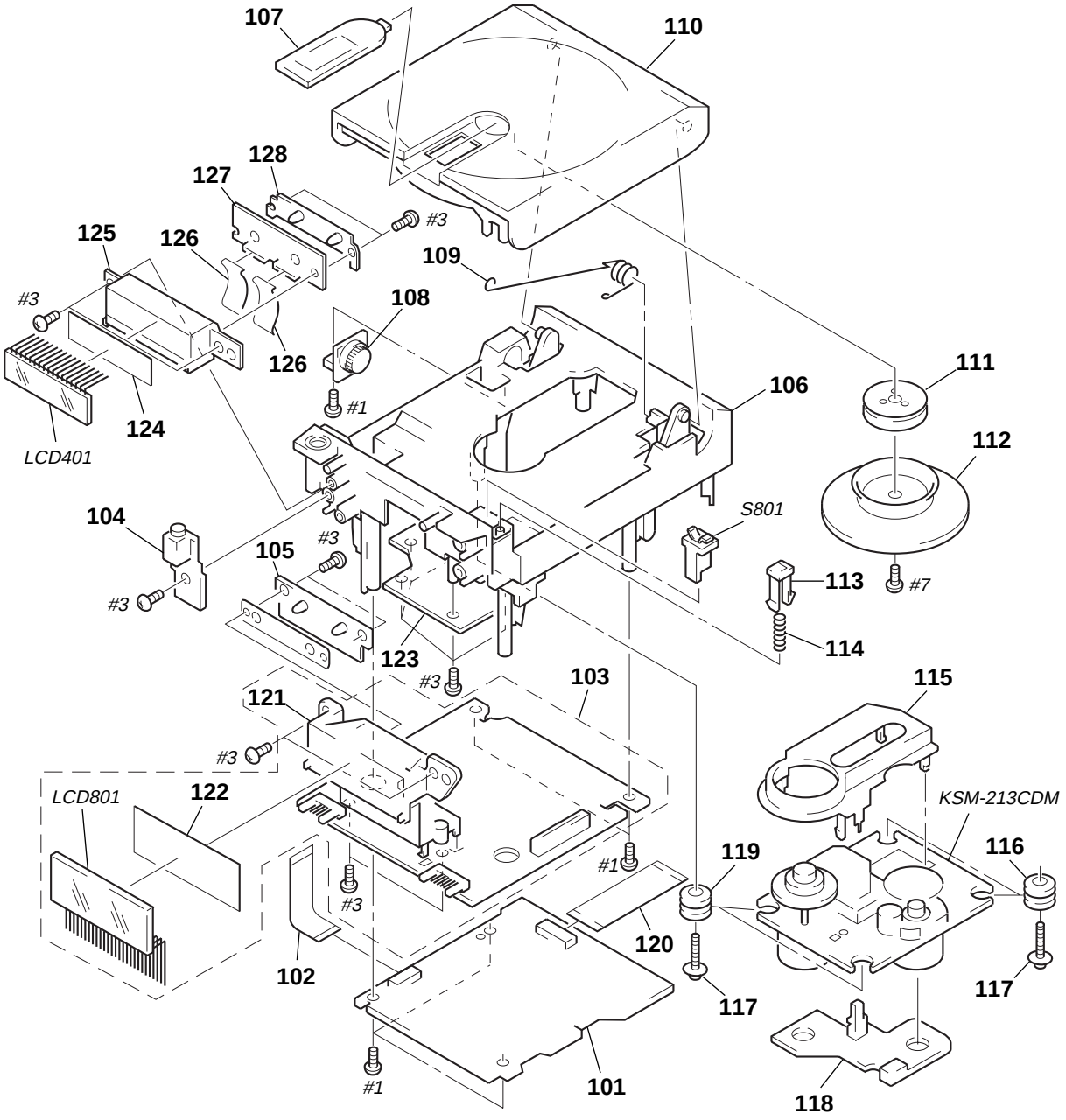
7-2. CABINET (FRONT) SECTION



Ref. No.	Part No.	Description	Remark
51	X-3373-799-1	LID (TERMINAL) ASSY	
52	X-3376-240-1	LID ASSY, CASSETTE	
53	X-3376-239-1	PANEL ASSY, FRONT	
54	3-028-250-01	BUTTON (MAIN)	
55	3-028-259-01	CABINET (FRONT)	
56	3-014-092-01	BUTTON (UPPER)	
* 57	1-671-486-11	SW2 BOARD	
* 58	1-671-485-11	SW1 BOARD	
59	3-014-097-01	PLATE (CASSETTE), LOCK	

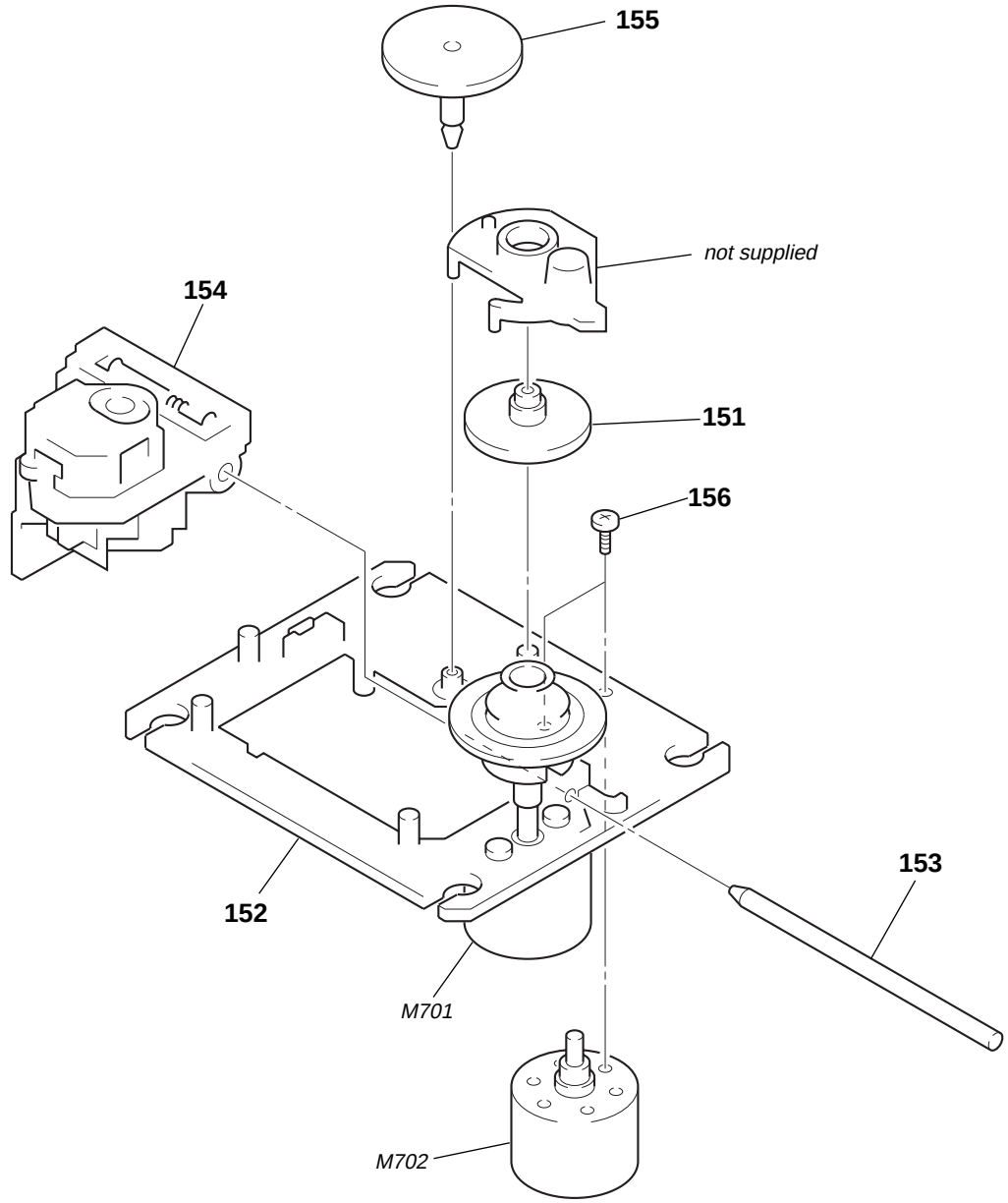
Ref. No.	Part No.	Description	Remark
60	3-014-098-01	RETAINER (CASSETTE), LOCK	
61	3-013-735-01	SPRING, COMPRESSION	
62	3-014-100-01	HOLDER (TERMINAL)	
* 63	A-3321-584-A	LINE BOARD, COMPLETE	
64	3-014-102-01	SPRING (CASSETTE)	
65	3-014-096-01	HOLDER (CASSETTE)	
66	3-014-103-01	SPRING (TERMINAL LID)	
67	3-343-248-01	DAMPER (P), SMALL	

7-3. CABINET (CD) SECTION



Ref. No.	Part No.	Description	Remark
* 101	A-3321-587-A	CD BOARD, COMPLETE	
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)	
* 103	A-3321-588-A	SYSTEM BOARD, COMPLETE	
* 104	1-671-487-11	H/P BOARD	
* 105	1-671-497-11	LAMP1 BOARD	
106	3-028-495-01	CHASSIS (CD)	
107	3-014-129-01	WINDOW (CD)	
108	3-351-377-11	DAMPER	
109	3-014-128-01	SPRING (CD)	
110	3-014-124-01	LID (CD)	
111	1-452-732-11	MAGNET	
112	3-910-112-01	PLATE (KSM-213-CDM), CHUCKING	
113	3-014-131-01	LEVER	
* 114	3-014-132-01	SPRING, COMPRESSION	
115	3-910-116-01	COVER, CD	
116	3-910-095-31	RUBBER, VIBRATION PROOF	
117	3-916-006-01	SCREW (2.6X16)	
* 118	1-639-678-12	CD MOTOR BOARD	
119	3-931-379-01	RUBBER, VIBRATION PROOF	
120	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
121	3-028-260-01	HOLDER, LCD	
122	3-028-491-01	ILLUMINATOR	
* 123	A-3321-617-A	RDS BOARD, COMPLETE	
124	3-028-490-01	ILLUMINATOR (RDS)	
125	3-028-492-01	HOLDER (RDS), LCD	
126	1-783-983-11	WIRE, PARALLEL (19 CORE)	
* 127	1-671-496-11	RDS.LCD BOARD	
* 128	1-671-498-11	LAMP2 BOARD	
LCD401	1-803-161-11	DISPLAY PANEL, LIQUID CRYSTAL (RDS)	
LCD801	1-803-162-11	DISPLAY PANEL, LIQUID CRYSTAL	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (⏏ PUSH OPEN/CLOSE)	

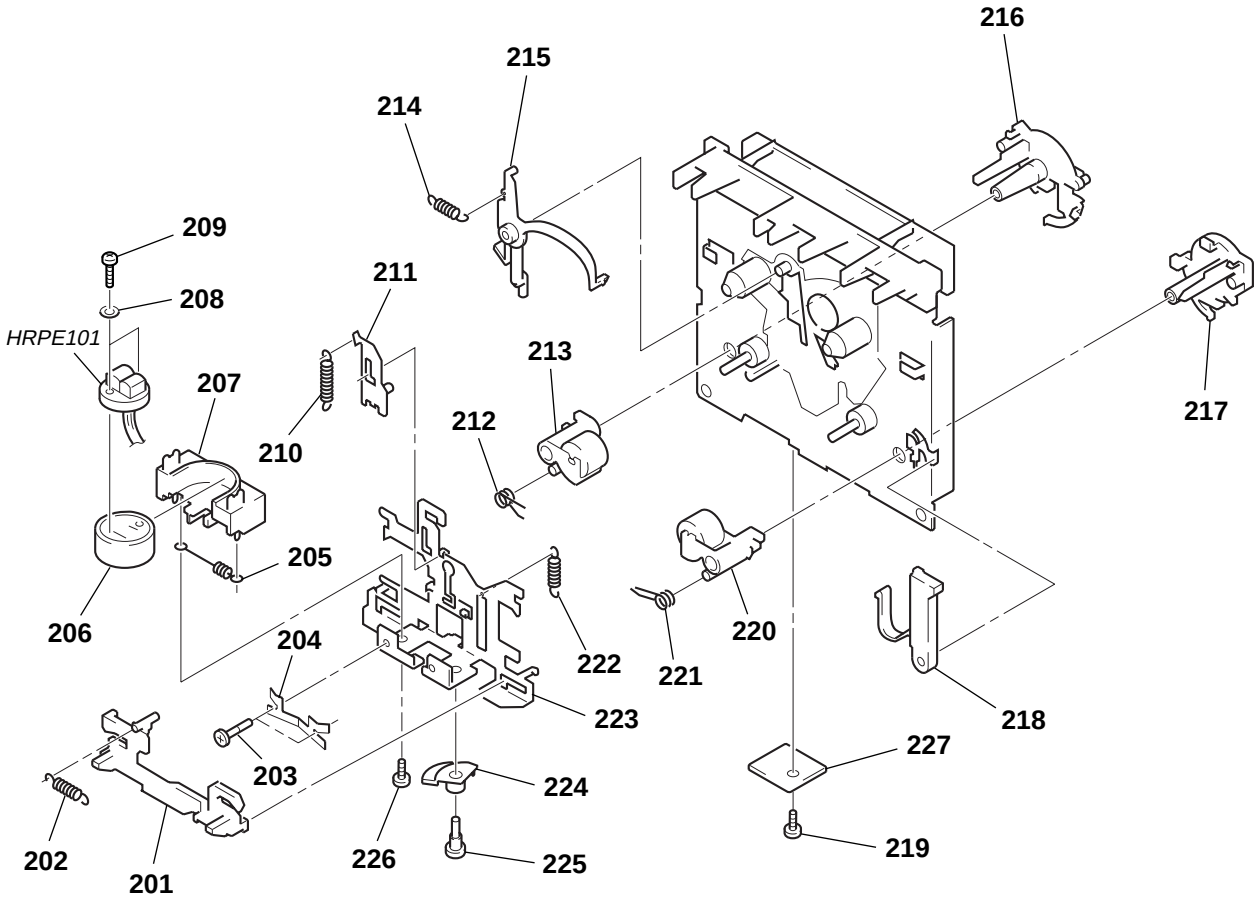
7-4. OPTICAL PICK-UP SECTION (KSM-213CDM)



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
151	2-627-003-02	GEAR (B) (RP)	
152	X-2626-202-2	CHASSIS ASSY (MB), MOTOR (SPINDLE) (INCLUDING M701)	
153	2-626-908-01	SHAFT, SLED	
⚠154	8-848-483-08	PICK-UP, OPTICAL KSS-213C/Z-N	
155	2-626-907-01	GEAR (A)	
156	3-713-786-51	SCREW +P 2X3	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	

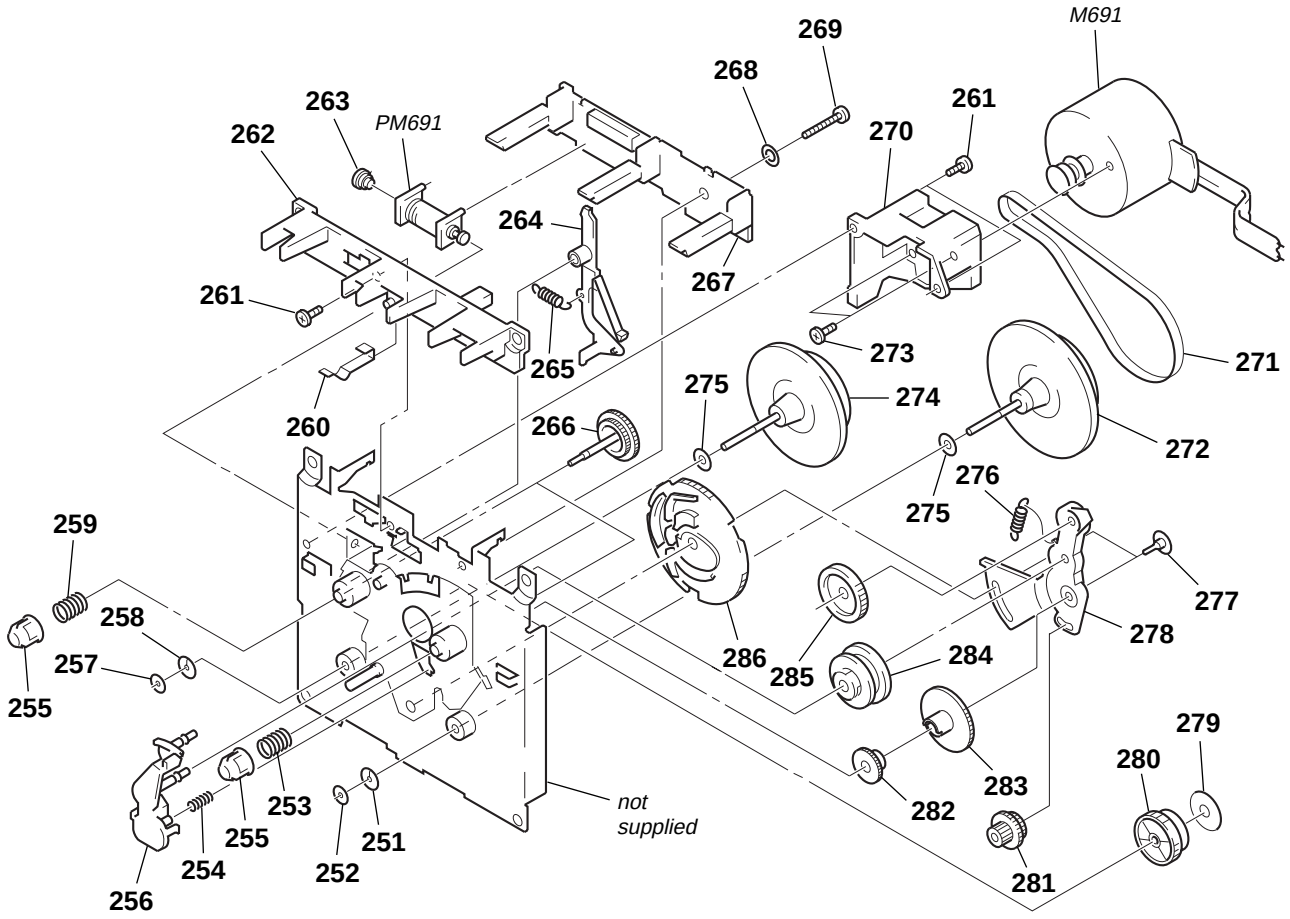
7-5. TAPE MECHANISM DECK SECTION-1 (MF-D307)



Ref. No.	Part No.	Description	Remark
201	3-938-905-01	HEAD, LEVER	
202	3-938-940-01	SPRING (L)	
203	3-938-941-01	SCREW (A)	
204	3-938-906-01	AZIMUTH, SPRING	
205	3-017-432-01	SPRING (A)	
206	3-938-901-01	HEAD, HOLDER	
* 207	3-938-904-01	HEAD, FRAME	
208	3-938-902-01	WASHER	
209	3-938-903-01	SCREW	
210	3-938-935-01	SPRING (G)	
* 211	X-3372-610-1	ASSIST ASSY, LEVER	
212	3-938-933-01	SPRING (E)	
213	3-017-592-01	ARM (PINCH L) ASSY	
214	3-938-934-01	SPRING (F)	

Ref. No.	Part No.	Description	Remark
* 215	3-938-916-01	BRAKE, ARM	
* 216	3-938-914-01	FRAME (C)	
* 217	3-938-913-01	FRAME (B)	
* 218	3-938-909-01	LOCK, EJECT	
219	3-938-944-01	SCREW (D)	
220	3-017-591-01	ARM (PINCH R) ASSY	
221	3-938-937-01	SPRING (I)	
222	3-938-938-01	SPRING (J)	
* 223	3-938-911-01	HEAD (B), CHASSIS	
224	3-938-907-01	HEAD, GEAR ARM	
225	3-938-943-01	SCREW (C)	
226	3-938-942-01	SCREW (B)	
* 227	1-662-743-11	HEAD BOARD	
HRPE101	1-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)	

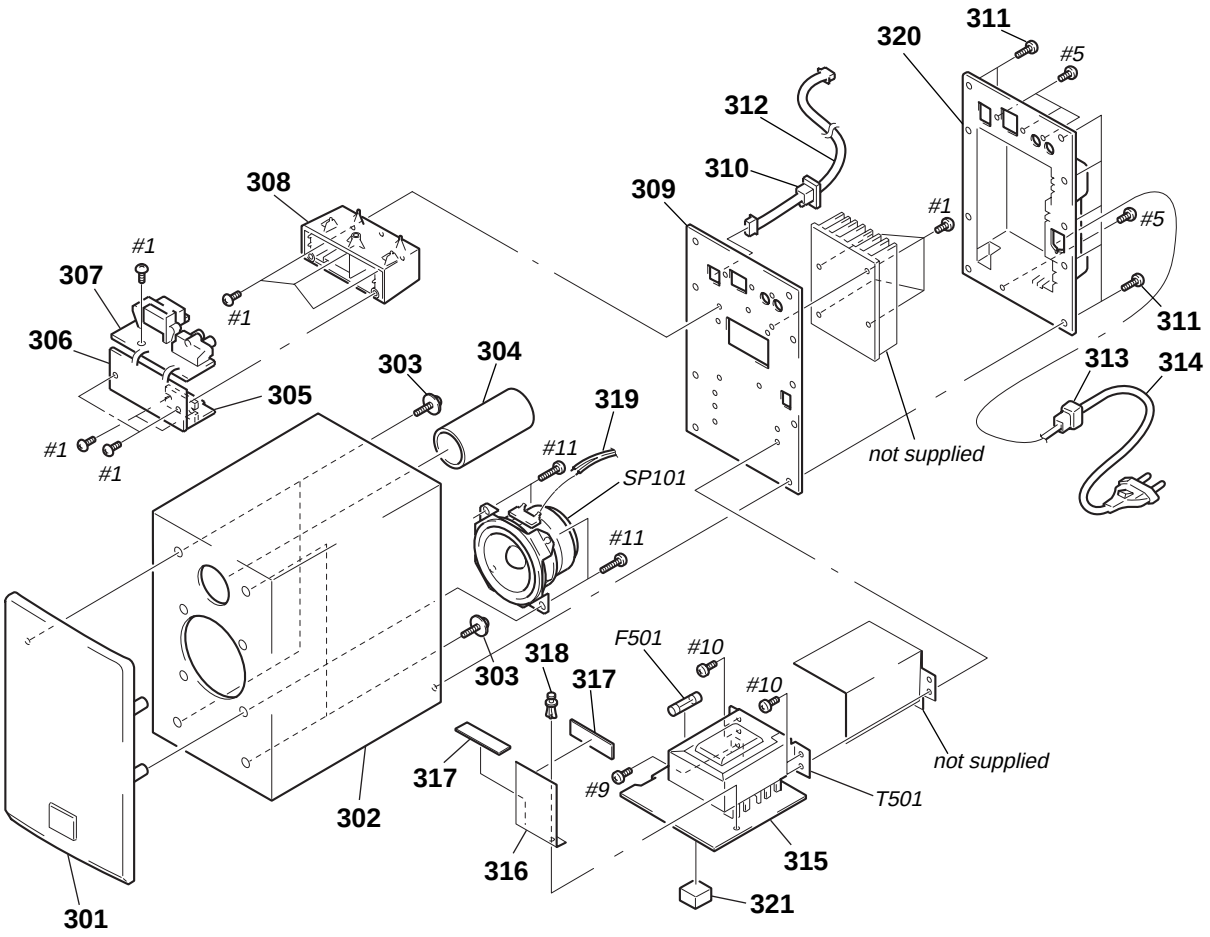
7-6. TAPE MECHANISM DECK SECTION-2 (MF-D307)



Ref. No.	Part No.	Description	Remark
251	3-938-949-01	WASHER (B)	
252	3-938-951-01	WASHER (D)	
253	3-938-936-01	SPRING (H)	
254	3-938-930-01	SPRING (B)	
255	3-938-910-01	REEL, CAP	
* 256	3-938-912-01	ARM (UD)	
257	3-938-952-01	WASHER (E)	
258	3-938-948-01	WASHER (A)	
259	3-938-932-01	SPRING (D)	
260	3-938-908-01	CASSETTE, SPRING	
261	3-938-945-01	SCREW (E)	
262	3-017-428-01	FRAME (D)	
263	3-938-920-01	PLUNGER, K	
* 264	3-938-918-01	TRIGGER, ARM	
265	3-938-931-01	SPRING (C)	
266	3-938-921-01	GEAR (REEL)	
* 267	1-662-742-11	SW BOARD	
268	3-938-954-01	WASHER (G)	
269	3-938-947-01	SCREW (G)	
270	3-017-431-01	BRACKET (MM)	

Ref. No.	Part No.	Description	Remark
271	3-017-430-01	BELT	
272	3-017-596-01	FLYWHEEL (R) ASSY	
273	3-017-434-01	SCREW (H)	
274	3-017-595-01	FLYWHEEL (L) ASSY	
275	3-938-950-01	WASHER (C)	
276	3-017-433-01	SPRING (K)	
277	3-938-946-01	SCREW (F)	
* 278	3-938-919-01	ARM (FR)	
279	3-017-435-01	REFLECTOR	
280	3-017-429-01	GEAR (REF)	
281	3-938-917-01	GEAR (A)	
282	3-938-924-01	GEAR (P)	
283	3-938-923-01	GEAR (FR)	
284	X-3372-613-1	CLUTCH ASSY	
285	3-938-925-01	GEAR (IDL)	
286	3-938-922-01	GEAR (CAM)	
M691	3-016-425-01	MOTOR ASSY (CAPSTAN/REEL) (including PULLEY)	
PM691	1-454-806-11	SOLENOID, PLUNGER	

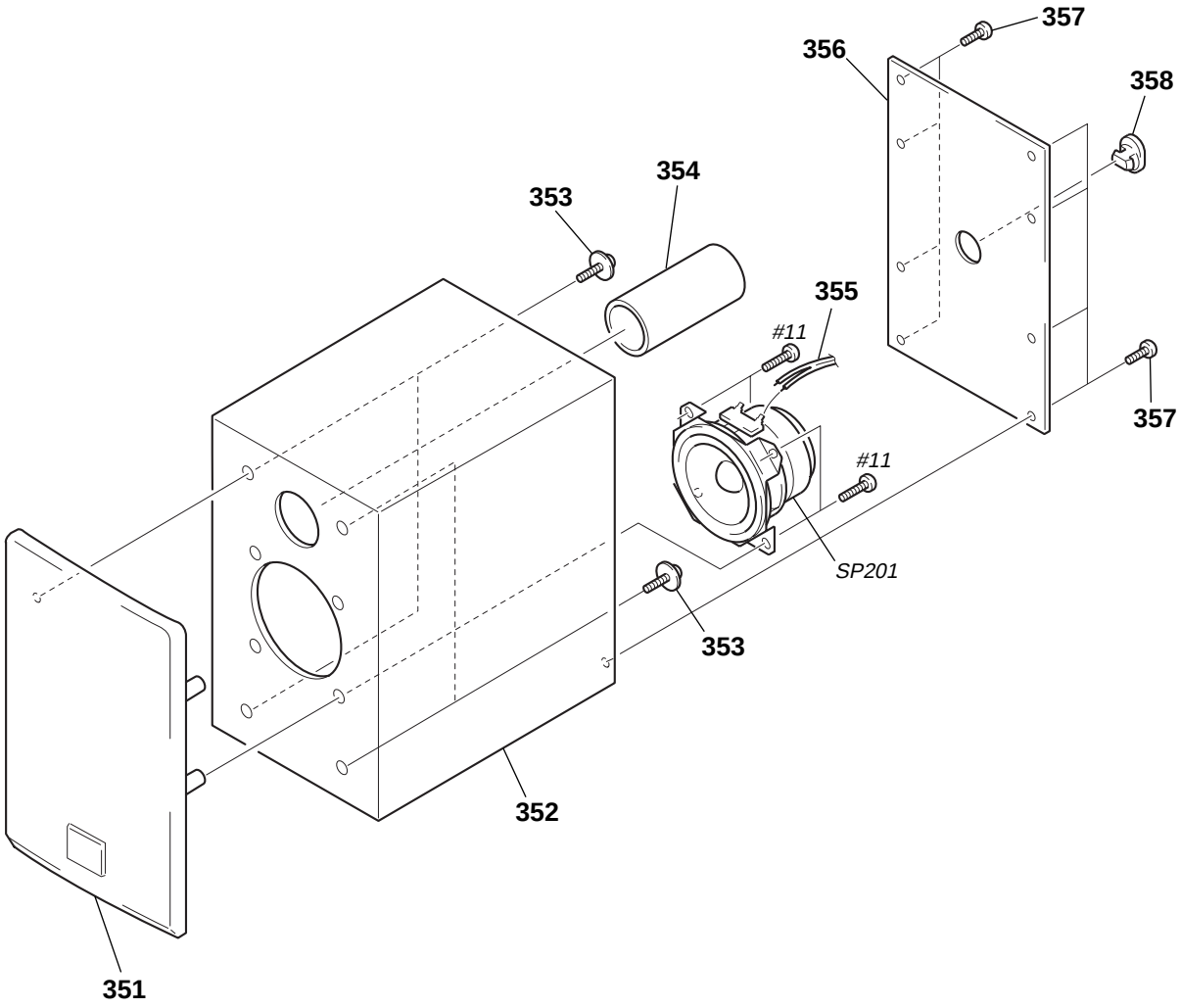
7-7. SPEAKER (L) SECTION



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
301	X-3376-076-1	SPEAKER (FRONT) SUB ASSY	
302	3-028-031-01	BOX, SPEAKER (G)	
302	3-028-031-11	BOX, SPEAKER (EXCEPT G)	
303	3-365-853-01	SCREW (+BTPWH) (3X12)	
304	3-028-028-01	DUCT (SPEAKER)	
* 305	1-671-065-11	POWER AMP BOARD	
* 306	1-671-066-11	TERMINAL BOARD	
* 307	1-671-068-11	JACK BOARD	
308	3-028-034-01	BRACKET (AMP)	
309	3-028-029-01	CHASSIS (L), REAR	
* 310	3-014-106-01	BUSHING (4P), CORD	
311	3-029-171-01	SCREW, +B TAPPING	
312	X-3374-496-1	CORD ASSY	
313	3-703-244-11	BUSHING (2104), CORD	
⚠314	1-575-651-11	CORD, POWER (EXCEPT UK)	
⚠314	1-751-520-11	CORD, POWER (UK)	
* 315	1-671-064-11	POWER BOARD	
* 316	3-017-037-01	INSULATOR	
317	3-568-749-00	CUSHION, ECM	
318	4-812-134-11	RIVET (DIA. 3.5), NYLON	
319	1-790-161-11	CORD, SPEAKER	
320	3-028-032-01	COVER (HEAT SINK)	
321	3-031-459-01	CUSHION (RT), RUBBER	
⚠F501	1-532-505-31	FUSE, TIME-LAG (T5AL/250V)	
SP101	1-505-607-11	SPEAKER (8cm) (L-CH)	
⚠T501	1-433-453-11	TRANSFORMER, POWER (SET)	

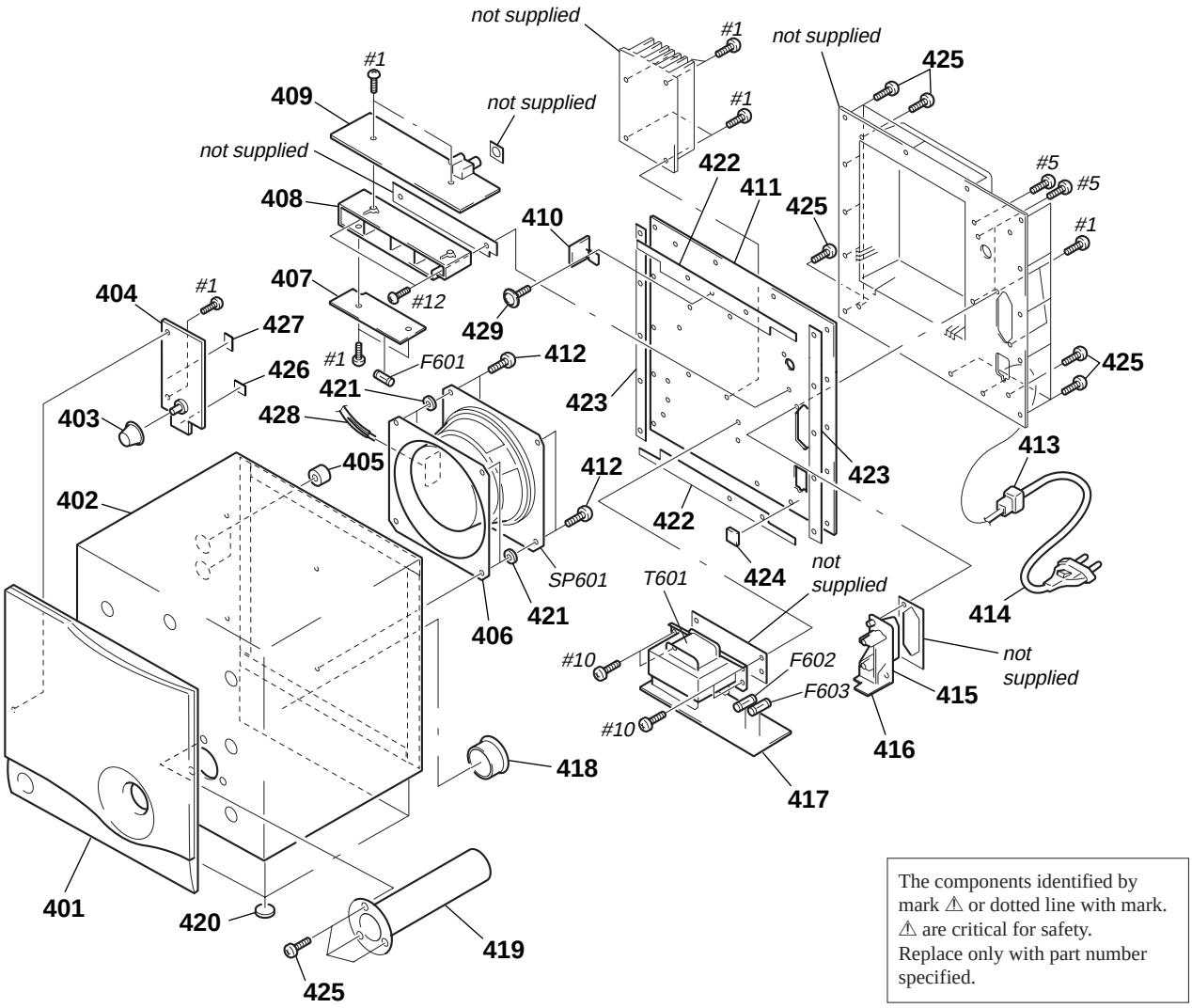
7-8. SPEAKER (R) SECTION



Ref. No.	Part No.	Description	Remark
351	X-3376-076-1	SPEAKER (FRONT) SUB ASSY	
352	3-028-031-01	BOX, SPEAKER (G)	
352	3-028-031-11	BOX, SPEAKER (EXCEPT G)	
353	3-365-853-01	SCREW (+BTPWH) (3X12)	
354	3-028-028-01	DUCT (SPEAKER)	
355	1-790-161-11	CORD, SPEAKER	

Ref. No.	Part No.	Description	Remark
356	3-028-030-01	PANEL (R), REAR (G)	
356	3-028-030-11	PANEL (R), REAR (EXCEPT G)	
357	3-029-171-01	SCREW, +B TAPPING	
358	3-014-109-01	STOPPER, CORD	
SP201	1-505-607-11	SPEAKER (8cm) (R-CH)	

7-9. WOOFER SPEAKER SECTION



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
401	3-028-253-01	PANEL (SW)	
402	3-028-255-01	BOX (SW), SPEAKER (G)	
402	3-028-255-11	BOX (SW), SPEAKER (EXCEPT G)	
403	3-028-254-01	KNOB, VOL	
* 404	1-671-494-11	LEVEL BOARD	
405	3-028-991-01	PACKING (WIRE)	
406	3-028-992-01	PACKING (SPEAKER)	
* 407	1-671-493-11	OUTLET BOARD	
408	3-028-256-01	HOLDER (SW), AMP	
* 409	A-3321-676-A	S/WOOFER AMP BOARD, COMPLETE	
* 410	1-672-061-11	S/WOOFER AMP2 BOARD	
411	3-028-257-01	CHASSIS (SW), REAR	
412	3-029-171-01	SCREW, +B TAPPING	
413	3-703-244-11	BUSHING (2104), CORD	
⚠414	1-575-651-11	CORD, POWER (EXCEPT UK)	
⚠414	1-751-520-11	CORD, POWER (UK)	
⚠415	1-785-575-11	SOCKET, AC	
* 416	1-672-060-11	AC OUTLET2 BOARD	

Ref. No.	Part No.	Description	Remark
* 417	1-671-492-11	WOOFER POWER BOARD	
418	3-030-375-01	HOLDER, DUCT	
419	3-028-252-01	DUCT (SW)	
420	3-031-264-01	FOOT (SW)	
421	3-029-240-01	CUSHION (4), SPEAKER	
422	3-028-994-01	PACKING (2) (REAR)	
423	3-028-993-01	PACKING (1) (REAR)	
424	3-031-265-01	CUSHION, RUBBER (SW)	
425	3-029-171-01	SCREW, +B TAPPING	
426	3-031-572-01	CUSHION (VOL), RUBBER	
427	3-031-459-01	CUSHION (PT), RUBBER	
428	1-790-161-11	CORD, SPEAKER	
429	3-031-669-01	SCREW, +BVPWH TAPPING	
⚠F601	1-532-501-31	FUSE, TIME-LAG (T0.8AL/250V)	
⚠F602	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
⚠F603	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
SP601	1-529-134-11	SPEAKER (WOOFER)	
⚠T601	1-433-450-11	TRANSFORMER, POWER (SUPER WOOFER)	

SECTION 8
ELECTRICAL PARTS LIST

AC OUTLET2 **AUDIO**

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

- Abbreviation
  IT : Italian model
  CET : East European & CIS model
  G : German model

Ref. No.	Part No.	Description			Remark
*	1-672-060-11	AC OUTLET2 BOARD			
		**********			
		< CONNECTOR >			
CNP607	1-564-321-00	PIN, CONNECTOR 2P			
		< AC SOCKET >			
⚠J602	1-785-575-11	SOCKET, AC (AC OUTLET MAX 35V)			
**********					
*	A-3321-586-A	AUDIO BOARD, COMPLETE			
		**********			
	7-685-871-01	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C101	1-162-294-31	CERAMIC	0.001uF	10%	50V
C102	1-104-664-11	ELECT	47uF	20%	10V
C103	1-137-442-11	FILM	0.039uF	5%	50V
C104	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C105	1-162-215-31	CERAMIC	47PF	5%	50V
C106	1-126-959-11	ELECT	0.47uF	20%	50V
C108	1-126-959-11	ELECT	0.47uF	20%	50V
C112	1-126-964-11	ELECT	10uF	20%	50V
C141	1-126-964-11	ELECT	10uF	20%	50V
C142	1-162-294-31	CERAMIC	0.001uF	10%	50V
C143	1-126-964-11	ELECT	10uF	20%	50V
C144	1-162-850-11	CERAMIC	0.082uF	10%	16V
C145	1-162-850-11	CERAMIC	0.082uF	10%	16V
C146	1-162-839-11	CERAMIC	0.01uF	10%	16V
C147	1-126-964-11	ELECT	10uF	20%	50V
C152	1-162-294-31	CERAMIC	0.001uF	10%	50V
C153	1-104-664-11	ELECT	47uF	20%	10V
C155	1-107-909-11	ELECT	47uF	20%	10V
C156	1-162-282-31	CERAMIC	100PF	10%	50V
C201	1-162-294-31	CERAMIC	0.001uF	10%	50V
C202	1-104-664-11	ELECT	47uF	20%	10V
C203	1-137-442-11	FILM	0.039uF	5%	50V
C204	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C205	1-162-215-31	CERAMIC	47PF	5%	50V
C206	1-126-959-11	ELECT	0.47uF	20%	50V
C208	1-126-959-11	ELECT	0.47uF	20%	50V
C210	1-162-282-31	CERAMIC	100PF	10%	50V
C212	1-126-964-11	ELECT	10uF	20%	50V
C241	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C242	1-162-294-31	CERAMIC	0.001uF	10%	50V
C243	1-126-964-11	ELECT	10uF	20%	50V
C244	1-162-850-11	CERAMIC	0.082uF	10%	16V
C245	1-162-850-11	CERAMIC	0.082uF	10%	16V
C246	1-162-839-11	CERAMIC	0.01uF	10%	16V
C247	1-126-964-11	ELECT	10uF	20%	50V
C252	1-162-294-31	CERAMIC	0.001uF	10%	50V
C253	1-104-664-11	ELECT	47uF	20%	10V
C255	1-107-909-11	ELECT	47uF	20%	10V
C256	1-162-282-31	CERAMIC	100PF	10%	50V
C301	1-104-665-11	ELECT	100uF	20%	10V
C302	1-126-925-11	ELECT	470uF	20%	10V
C303	1-126-963-11	ELECT	4.7uF	20%	50V
C304	1-104-665-11	ELECT	100uF	20%	10V
C307	1-161-494-00	CERAMIC	0.022uF		25V
C311	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C312	1-104-664-11	ELECT	47uF	20%	10V
C313	1-137-350-11	MYLAR	0.015uF	10%	100V
C314	1-162-294-31	CERAMIC	0.001uF	10%	50V
C315	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C316	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C324	1-126-961-11	ELECT	2.2uF	20%	50V
C325	1-126-961-11	ELECT	2.2uF	20%	50V
C326	1-126-963-11	ELECT	4.7uF	20%	50V
C327	1-104-664-11	ELECT	47uF	20%	10V
C328	1-126-959-11	ELECT	0.47uF	20%	50V
C329	1-137-189-11	FILM	0.18uF	5%	50V
C333	1-104-664-11	ELECT	47uF	20%	10V
C334	1-126-963-11	ELECT	4.7uF	20%	50V
C335	1-126-960-11	ELECT	1uF	20%	50V
C336	1-126-961-11	ELECT	2.2uF	20%	50V
C337	1-104-665-11	ELECT	100uF	20%	10V
C338	1-161-494-00	CERAMIC	0.022uF		25V
C339	1-161-494-00	CERAMIC	0.022uF		25V
C340	1-162-290-31	CERAMIC	470PF	10%	50V
C341	1-162-290-31	CERAMIC	470PF	10%	50V
C342	1-162-290-31	CERAMIC	470PF	10%	50V
C344	1-162-282-31	CERAMIC	100PF	10%	50V
C345	1-162-306-11	CERAMIC	0.01uF	30%	16V
C346	1-162-306-11	CERAMIC	0.01uF	30%	16V
C347	1-126-925-11	ELECT	470uF	20%	10V
C348	1-126-959-11	ELECT	0.47uF	20%	50V
C350	1-162-306-11	CERAMIC	0.01uF	30%	16V
C351	1-104-652-11	ELECT	470uF	20%	10V
C352	1-104-665-11	ELECT	100uF	20%	10V

AUDIO

Ref. No.	Part No.	Description			Remark
C353	1-126-940-11	ELECT	330uF	20%	25V
C355	1-104-664-11	ELECT	47uF	20%	10V
C356	1-161-494-00	CERAMIC	0.022uF		25V
C357	1-104-665-11	ELECT	100uF	20%	10V
C358	1-161-494-00	CERAMIC	0.022uF		25V
C359	1-126-964-11	ELECT	10uF	20%	50V
C360	1-161-494-00	CERAMIC	0.022uF		25V
C397	1-126-964-11	ELECT	10uF	20%	50V
C398	1-126-964-11	ELECT	10uF	20%	50V
C399	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CNP301	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
* CNP303	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
CNP304	1-573-826-11	CONNECTOR, BOARD TO BOARD 12P			
* CNP305	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CNP306	1-569-312-11	SOCKET, CONNECTOR (L TYRE) 27P			
* CNP307	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
* CNP309	1-779-536-11	PLUG, CONNECTOR 4P (POWER IN)			
CNP310	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CNP311	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D302	8-719-991-33	DIODE 1SS133T-77			
D304	8-719-991-33	DIODE 1SS133T-77			
D305	8-719-991-33	DIODE 1SS133T-77			
D307	8-719-991-33	DIODE 1SS133T-77			
D308	8-719-991-33	DIODE 1SS133T-77			
D309	8-719-991-33	DIODE 1SS133T-77			
D310	8-719-991-33	DIODE 1SS133T-77			
D311	8-719-110-09	DIODE RD8.2ES-B3			
D312	8-719-991-33	DIODE 1SS133T-77			
D313	8-719-109-89	DIODE RD5.6ESB2			
D314	8-719-991-33	DIODE 1SS133T-77			
D315	8-719-921-89	DIODE MTZJ-13C			
D316	8-719-991-33	DIODE 1SS133T-77			
D317	8-719-991-33	DIODE 1SS133T-77			
D318	8-719-991-33	DIODE 1SS133T-77			
D319	8-719-991-33	DIODE 1SS133T-77			
D320	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC301	8-759-264-71	IC TA2068N			
IC302	8-759-432-41	IC BH3854AS			
IC303	8-759-701-54	IC NJM2073D			
IC305	8-759-905-47	IC BA338			
		< JACK >			
J302	1-770-612-12	JACK, PIN 2P (SIGNAL OUTPUT)			
J303	1-784-910-31	JACK, PIN 1P (SIGNAL OUTPUT WOOFER)			

Ref. No.	Part No.	Description	Remark
		< FERRITE BEAD >	
JW121	1-410-397-21	FERRITE BEAD INDUCTOR 1.1uH	
L154	1-410-397-21	FERRITE BEAD INDUCTOR 1.1uH	
L254	1-410-397-21	FERRITE BEAD INDUCTOR 1.1uH	
		< CONNECTOR >	
* P301	1-564-187-00	PIN, CONNECTOR	
* P302	1-564-187-00	PIN, CONNECTOR	
		< TRANSISTOR >	
Q102	8-729-900-74	TRANSISTOR DTC143TS	
Q103	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q131	8-729-900-74	TRANSISTOR DTC143TS	
Q132	8-729-900-74	TRANSISTOR DTC143TS	
Q202	8-729-900-74	TRANSISTOR DTC143TS	
Q203	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q231	8-729-900-74	TRANSISTOR DTC143TS	
Q232	8-729-900-74	TRANSISTOR DTC143TS	
Q301	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q302	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q303	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q304	8-729-422-57	TRANSISTOR UN4111	
Q305	8-729-900-80	TRANSISTOR DTC114ES	
Q306	8-729-900-80	TRANSISTOR DTC114ES	
Q307	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q308	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q309	8-729-036-86	TRANSISTOR KTC3203Y-AT	
Q310	8-729-900-80	TRANSISTOR DTC114ES	
Q311	8-729-195-23	TRANSISTOR 2SA952	
Q312	8-729-900-80	TRANSISTOR DTC114ES	
Q313	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q314	8-729-900-80	TRANSISTOR DTC114ES	
Q316	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q317	8-729-900-80	TRANSISTOR DTC114ES	
Q319	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2	
Q320	8-729-195-23	TRANSISTOR 2SA952	
Q323	8-729-265-52	TRANSISTOR 2SC2655	
Q324	8-729-422-57	TRANSISTOR UN4111	
Q325	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q326	8-729-422-57	TRANSISTOR UN4111	
Q327	8-729-900-80	TRANSISTOR DTC114ES	
Q328	8-729-900-80	TRANSISTOR DTC114ES	
Q329	8-729-194-57	TRANSISTOR 2SC945-P	
Q330	8-729-194-57	TRANSISTOR 2SC945-P	
Q331	8-729-900-80	TRANSISTOR DTC114ES	
Q332	8-729-422-57	TRANSISTOR UN4111	
Q333	8-729-422-57	TRANSISTOR UN4111	
Q334	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q335	8-729-422-57	TRANSISTOR UN4111	
Q398	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q399	8-729-119-78	TRANSISTOR 2SC2785-HFE	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R101	1-249-431-11	CARBON	15K	5%	1/4W
R102	1-249-404-00	CARBON	82	5%	1/4W
R103	1-249-441-11	CARBON	100K	5%	1/4W
R104	1-247-843-11	CARBON	3.3K	5%	1/4W
R110	1-247-807-11	CARBON	100	5%	1/4W
R111	1-247-887-00	CARBON	220K	5%	1/4W
R112	1-249-437-11	CARBON	47K	5%	1/4W
R114	1-249-417-11	CARBON	1K	5%	1/4W
R115	1-249-417-11	CARBON	1K	5%	1/4W
R116	1-249-437-11	CARBON	47K	5%	1/4W
R127	1-249-437-11	CARBON	47K	5%	1/4W
R140	1-249-425-11	CARBON	4.7K	5%	1/4W
R145	1-249-429-11	CARBON	10K	5%	1/4W
R146	1-249-417-11	CARBON	1K	5%	1/4W
R151	1-249-429-11	CARBON	10K	5%	1/4W
R152	1-249-425-11	CARBON	4.7K	5%	1/4W
R153	1-249-417-11	CARBON	1K	5%	1/4W
R155	1-247-887-00	CARBON	220K	5%	1/4W
R156	1-249-425-11	CARBON	4.7K	5%	1/4W
R201	1-249-431-11	CARBON	15K	5%	1/4W
R202	1-249-404-00	CARBON	82	5%	1/4W
R203	1-249-441-11	CARBON	100K	5%	1/4W
R204	1-247-843-11	CARBON	3.3K	5%	1/4W
R210	1-247-807-11	CARBON	100	5%	1/4W
R211	1-247-887-00	CARBON	220K	5%	1/4W
R212	1-249-437-11	CARBON	47K	5%	1/4W
R214	1-249-417-11	CARBON	1K	5%	1/4W
R215	1-249-417-11	CARBON	1K	5%	1/4W
R216	1-249-437-11	CARBON	47K	5%	1/4W
R227	1-249-437-11	CARBON	47K	5%	1/4W
R240	1-249-425-11	CARBON	4.7K	5%	1/4W
R245	1-249-429-11	CARBON	10K	5%	1/4W
R246	1-249-417-11	CARBON	1K	5%	1/4W
R251	1-249-429-11	CARBON	10K	5%	1/4W
R252	1-249-425-11	CARBON	4.7K	5%	1/4W
R253	1-249-417-11	CARBON	1K	5%	1/4W
R255	1-247-887-00	CARBON	220K	5%	1/4W
R256	1-249-425-11	CARBON	4.7K	5%	1/4W
R301	1-247-903-00	CARBON	1M	5%	1/4W
R302	1-249-441-11	CARBON	100K	5%	1/4W
R303	1-249-429-11	CARBON	10K	5%	1/4W
R304	1-249-429-11	CARBON	10K	5%	1/4W
R305	1-249-421-11	CARBON	2.2K	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W
R307	1-247-807-11	CARBON	100	5%	1/4W
R311	1-249-389-11	CARBON	4.7	5%	1/4W
R312	1-249-439-11	CARBON	68K	5%	1/4W
R313	1-249-389-11	CARBON	4.7	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-429-11	CARBON	10K	5%	1/4W
R316	1-249-425-11	CARBON	4.7K	5%	1/4W
R317	1-247-807-11	CARBON	100	5%	1/4W
R318	1-249-435-11	CARBON	33K	5%	1/4W
R319	1-247-895-00	CARBON	470K	5%	1/4W
R320	1-247-903-00	CARBON	1M	5%	1/4W
R323	1-249-425-11	CARBON	4.7K	5%	1/4W
R324	1-249-417-11	CARBON	1K	5%	1/4W
R325	1-249-417-11	CARBON	1K	5%	1/4W
R327	1-249-417-11	CARBON	1K	5%	1/4W
R328	1-249-417-11	CARBON	1K	5%	1/4W
R329	1-249-417-11	CARBON	1K	5%	1/4W
R331	1-247-863-00	CARBON	22K	5%	1/4W
R332	1-249-437-11	CARBON	47K	5%	1/4W
R334	1-249-429-11	CARBON	10K	5%	1/4W
R335	1-249-425-11	CARBON	4.7K	5%	1/4W
R336	1-249-401-11	CARBON	47	5%	1/4W
R337	1-249-437-11	CARBON	47K	5%	1/4W
R338	1-249-417-11	CARBON	1K	5%	1/4W
R339	1-249-417-11	CARBON	1K	5%	1/4W
R340	1-249-417-11	CARBON	1K	5%	1/4W
R342	1-249-425-11	CARBON	4.7K	5%	1/4W
R343	1-249-429-11	CARBON	10K	5%	1/4W
R344	1-249-429-11	CARBON	10K	5%	1/4W
R345	1-249-441-11	CARBON	100K	5%	1/4W
R347	1-249-401-11	CARBON	47	5%	1/4W
R349	1-249-435-11	CARBON	33K	5%	1/4W
R351	1-249-401-11	CARBON	47	5%	1/4W
R352	1-249-428-11	CARBON	8.2K	5%	1/4W
R353	1-249-417-11	CARBON	1K	5%	1/4W
R355	1-247-885-00	CARBON	180K	5%	1/4W
R356	1-249-437-11	CARBON	47K	5%	1/4W
R357	1-249-421-11	CARBON	2.2K	5%	1/4W
R360	1-249-441-11	CARBON	100K	5%	1/4W
R361	1-247-815-00	CARBON	220	5%	1/4W
R362	1-247-807-11	CARBON	100	5%	1/4W
R363	1-249-441-11	CARBON	100K	5%	1/4W
R364	1-249-413-11	CARBON	470	5%	1/4W
R367	1-247-807-11	CARBON	100	5%	1/4W
R368	1-249-413-11	CARBON	470	5%	1/4W
R369	1-247-807-11	CARBON	100	5%	1/4W
R370	1-249-441-11	CARBON	100K	5%	1/4W
R371	1-249-421-11	CARBON	2.2K	5%	1/4W
R376	1-249-421-11	CARBON	2.2K	5%	1/4W
R377	1-249-421-11	CARBON	2.2K	5%	1/4W
R378	1-247-807-11	CARBON	100	5%	1/4W
R379	1-247-815-00	CARBON	220	5%	1/4W
R390	1-249-437-11	CARBON	47K	5%	1/4W
R391	1-249-437-11	CARBON	47K	5%	1/4W
R392	1-249-429-11	CARBON	10K	5%	1/4W
R393	1-249-429-11	CARBON	10K	5%	1/4W
R394	1-249-425-11	CARBON	4.7K	5%	1/4W
R395	1-247-843-11	CARBON	3.3K	5%	1/4W
R396	1-249-413-11	CARBON	470	5%	1/4W
R397	1-247-807-11	CARBON	100	5%	1/4W

AUDIO **CD**

Ref. No.	Part No.	Description			Remark
R398	1-249-429-11	CARBON	10K	5%	1/4W
R399	1-249-429-11	CARBON	10K	5%	1/4W
		< TRANSFORMER >			
T301	1-429-820-11	TRANSFORMER, BIAS OSCILLATION			
**********					
*	A-3321-587-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C702	1-136-165-00	FILM	0.1uF	5%	50V
C703	1-136-165-00	FILM	0.1uF	5%	50V
C704	1-136-165-00	FILM	0.1uF	5%	50V
C705	1-131-375-00	TANTALUM	4.7uF	10%	10V
C706	1-136-159-00	FILM	0.033uF	5%	50V
C707	1-136-156-00	FILM	0.018uF	5%	50V
C708	1-162-199-31	CERAMIC	10PF	5%	50V
C709	1-126-162-11	ELECT	3.3uF	20%	50V
C710	1-136-495-11	FILM	0.068uF	5%	50V
C711	1-162-215-31	CERAMIC	47PF	5%	50V
C712	1-162-306-11	CERAMIC	0.01uF	30%	16V
C713	1-136-159-00	FILM	0.033uF	5%	50V
C714	1-162-306-11	CERAMIC	0.01uF	30%	16V
C715	1-136-159-00	FILM	0.033uF	5%	50V
C716	1-136-165-00	FILM	0.1uF	5%	50V
C717	1-104-664-11	ELECT	47uF	20%	10V
C718	1-126-964-11	ELECT	10uF	20%	50V
C721	1-130-491-00	MYLAR	0.047uF	5%	50V
C722	1-161-494-00	CERAMIC	0.022uF		25V
C723	1-130-495-00	MYLAR	0.1uF	5%	50V
C724	1-128-241-11	ELECT	220uF	20%	10V
C725	1-162-199-31	CERAMIC	10PF	5%	50V
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V
C727	1-162-306-11	CERAMIC	0.01uF	30%	16V
C728	1-162-306-11	CERAMIC	0.01uF	30%	16V
C729	1-124-589-11	ELECT	47uF	20%	16V
C730	1-104-652-11	ELECT	470uF	20%	10V
C731	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C732	1-130-299-00	FILM	0.012uF	5%	50V
C734	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C741	1-124-589-11	ELECT	47uF	20%	16V
C742	1-137-194-00	FILM	0.47uF	5%	50V
C743	1-162-290-31	CERAMIC	470PF	10%	50V
C744	1-162-286-21	CERAMIC	220PF	10%	50V
C745	1-136-169-00	FILM	0.22uF	5%	50V
C746	1-162-306-11	CERAMIC	0.01uF	30%	16V
C747	1-137-370-11	FILM	0.01uF	5%	50V
C750	1-162-306-11	CERAMIC	0.01uF	30%	16V
C751	1-162-306-11	CERAMIC	0.01uF	30%	16V
C752	1-162-201-31	CERAMIC	12PF	5%	50V
C753	1-162-203-31	CERAMIC	15PF	5%	50V

Ref. No.	Part No.	Description			Remark
C754	1-124-589-11	ELECT	47uF	20%	16V
C755	1-162-306-11	CERAMIC	0.01uF	30%	16V
C756	1-162-306-11	CERAMIC	0.01uF	30%	16V
C757	1-162-306-11	CERAMIC	0.01uF	30%	16V
C758	1-162-306-11	CERAMIC	0.01uF	30%	16V
C759	1-162-306-11	CERAMIC	0.01uF	30%	16V
C760	1-162-306-11	CERAMIC	0.01uF	30%	16V
C761	1-162-306-11	CERAMIC	0.01uF	30%	16V
C763	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C764	1-124-259-11	ELECT	4.7uF	20%	16V
C765	1-162-306-11	CERAMIC	0.01uF	30%	16V
C773	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C774	1-124-259-11	ELECT	4.7uF	20%	16V
C782	1-162-294-31	CERAMIC	0.001uF	10%	50V
C787	1-128-241-11	ELECT	220uF	20%	10V
C788	1-162-306-11	CERAMIC	0.01uF	30%	16V
C792	1-162-290-31	CERAMIC	470PF	10%	50V
C793	1-162-290-31	CERAMIC	470PF	10%	50V
C796	1-162-306-11	CERAMIC	0.01uF	30%	16V
C797	1-162-294-31	CERAMIC	0.001uF	10%	50V
C798	1-162-294-31	CERAMIC	0.001uF	10%	50V
C799	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
* CNP701	1-779-466-11	CONNECTOR, FFC/FPC 16P			
* CNP705	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CNP706	1-691-068-21	HOUSING, CONNECTOR 9P			
		< IC >			
IC701	8-752-074-34	IC CXA1782CQ			
IC702	8-752-372-94	IC CXD2507AQ			
IC703	8-759-473-42	IC BA6898FP			
IC704	8-759-426-44	IC 27C512-C35A65-V3.03			
		< COIL >			
L701	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L702	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L752	1-410-324-11	INDUCTOR	4.7uH		
L760	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L770	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
		< TRANSISTOR >			
Q701	8-729-195-23	TRANSISTOR 2SA952			
Q703	8-729-900-74	TRANSISTOR DTC143TS			
		< RESISTOR >			
R700	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-249-440-11	CARBON	82K	5%	1/4W
R702	1-247-896-11	CARBON	510K	5%	1/4W
R703	1-249-441-11	CARBON	100K	5%	1/4W
R704	1-247-883-00	CARBON	150K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-247-876-11	CARBON	75K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R707	1-249-432-11	CARBON	18K	5%	1/4W
R708	1-247-883-00	CARBON	150K	5%	1/4W
R709	1-247-862-11	CARBON	20K	5%	1/4W
R710	1-249-393-11	CARBON	10	5%	1/4W
R714	1-247-883-00	CARBON	150K	5%	1/4W
R715	1-249-430-11	CARBON	12K	5%	1/4W
R716	1-249-430-11	CARBON	12K	5%	1/4W
R717	1-249-429-11	CARBON	10K	5%	1/4W
R718	1-247-899-11	CARBON	680K	5%	1/4W
R720	1-247-891-00	CARBON	330K	5%	1/4W
R722	1-249-439-11	CARBON	68K	5%	1/4W
R723	1-249-440-11	CARBON	82K	5%	1/4W
R725	1-249-437-11	CARBON	47K	5%	1/4W
R726	1-249-429-11	CARBON	10K	5%	1/4W
R727	1-249-429-11	CARBON	10K	5%	1/4W
R730	1-249-435-11	CARBON	33K	5%	1/4W
R731	1-247-863-00	CARBON	22K	5%	1/4W
R734	1-249-437-11	CARBON	47K	5%	1/4W
R735	1-249-429-11	CARBON	10K	5%	1/4W
R736	1-249-417-11	CARBON	1K	5%	1/4W
R740	1-247-843-11	CARBON	3.3K	5%	1/4W
R741	1-249-417-11	CARBON	1K	5%	1/4W
R742	1-249-429-11	CARBON	10K	5%	1/4W
R743	1-247-903-00	CARBON	1M	5%	1/4W
R744	1-247-887-00	CARBON	220K	5%	1/4W
R745	1-249-429-11	CARBON	10K	5%	1/4W
R746	1-249-437-11	CARBON	47K	5%	1/4W
R748	1-249-429-11	CARBON	10K	5%	1/4W
R749	1-249-429-11	CARBON	10K	5%	1/4W
R750	1-249-413-11	CARBON	470	5%	1/4W
R751	1-247-807-11	CARBON	100	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R754	1-249-429-11	CARBON	10K	5%	1/4W
R756	1-249-440-11	CARBON	82K	5%	1/4W
R757	1-249-439-11	CARBON	68K	5%	1/4W
R758	1-249-439-11	CARBON	68K	5%	1/4W
R759	1-249-439-11	CARBON	68K	5%	1/4W
R760	1-249-417-11	CARBON	1K	5%	1/4W
R761	1-249-417-11	CARBON	1K	5%	1/4W
R762	1-249-417-11	CARBON	1K	5%	1/4W
R763	1-249-417-11	CARBON	1K	5%	1/4W
R764	1-249-417-11	CARBON	1K	5%	1/4W
R766	1-249-417-11	CARBON	1K	5%	1/4W
R776	1-249-417-11	CARBON	1K	5%	1/4W
R791	1-247-843-11	CARBON	3.3K	5%	1/4W
		< VARIABLE RESISTOR >			
RV701	1-241-786-11	RES, ADJ, CARBON	22K		
RV702	1-241-786-11	RES, ADJ, CARBON	22K		
RV703	1-223-459-21	RES, ADJ, CERMET	2.2K		
RV704	1-241-786-11	RES, ADJ, CARBON	22K		

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X701	1-767-226-11	VIBRATOR, CRYSTAL (16.9344MHz)			
**********					
*	1-639-678-12	CD MOTOR BOARD			
		**********			
		< CONNECTOR >			
CNP707	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< SWITCH >			
S701	1-572-085-11	SWITCH, LEAF (LIMIT)			
**********					
*	1-671-487-11	H/P BOARD			
		**********			
		< CAPACITOR >			
C154	1-162-294-31	CERAMIC	0.001uF	10%	50V
C254	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< JACK >			
J301	1-566-891-11	JACK (🎧)			
		< COIL >			
L151	1-247-807-31	CARBON	100	5%	1/4W
L251	1-247-807-31	CARBON	100	5%	1/4W
L351	1-414-142-11	INDUCTOR	1uH		
**********					
*	1-662-743-11	HEAD BOARD			
		**********			
**********					
*	1-671-068-11	JACK BOARD			
		**********			
		< CAPACITOR >			
C186	1-162-282-31	CERAMIC	100PF	10%	50V
C286	1-162-282-31	CERAMIC	100PF	10%	50V
C384	1-161-494-00	CERAMIC	0.022uF		25V
C506	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< JACK >			
* J501	1-537-405-11	TERMINAL BOARD (2P SP)			(SPEAKER OUT R-ch)
* J502	1-750-178-31	JACK, PIN 2P (SIGNAL INPUT)			
		< CABLE HOLDER >			
* KH511	1-565-385-11	HOLDER, CABLE 4P			
* KH513	1-573-287-11	HOLDER, CABLE 2P			

JACK LAMP1 LAMP2 LEVEL LINE OUTLET

Ref. No.	Part No.	Description			Remark
		< COIL >			
L504	1-420-872-00	COIL, AIR-CORE			
		< RESISTOR >			
R502	1-249-421-11	CARBON	2.2K	5%	1/4W
R503	1-249-421-11	CARBON	2.2K	5%	1/4W
**********					
*	1-671-497-11	LAMP1 BOARD			
		**********			
		< PILOT LAMP >			
PL801	1-517-474-31	LAMP, PILOT			
PL802	1-517-474-31	LAMP, PILOT			
**********					
*	1-671-498-11	LAMP2 BOARD			
		**********			
		< PILOT LAMP >			
PL804	1-517-474-31	LAMP, PILOT			
PL805	1-517-474-31	LAMP, PILOT			
**********					
*	1-671-494-11	LEVEL BOARD			
		**********			
	3-028-254-01	KNOB, VOL			
		< CONNECTOR >			
CNP604	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
		< DIODE >			
D611	8-719-941-07	LED SLC22VR3 (POWER)			
		< VARIABLE RESISTOR >			
RV601	1-238-555-11	RES, VAR, CARBON 50K (LEVEL)			
**********					
*	A-3321-584-A	LINE BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C123	1-162-282-31	CERAMIC	100PF	10%	50V
C125	1-126-964-11	ELECT	10uF	20%	50V
C126	1-126-964-11	ELECT	10uF	20%	50V
C223	1-162-282-31	CERAMIC	100PF	10%	50V
C225	1-126-964-11	ELECT	10uF	20%	50V
C226	1-126-964-11	ELECT	10uF	20%	50V
C318	1-126-963-11	ELECT	4.7uF	20%	50V
C319	1-161-494-00	CERAMIC	0.022uF		25V
C320	1-104-665-11	ELECT	100uF	20%	10V
C321	1-104-664-11	ELECT	47uF	20%	10V

Ref. No.	Part No.	Description			Remark
		< DIODE >			
D321	8-719-991-33	DIODE 1SS133T-77			
D322	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC304	8-759-634-51	IC M5218AP			
J331	8-749-921-12	IC GP1F32T (OPTICAL DIGITAL OUT (CD))			
		< JACK >			
J323	1-566-822-21	JACK (LINE IN)			
J332	1-566-822-21	JACK (LINE OUT)			
		< COIL >			
L111	1-412-503-11	INDUCTOR	22uH		
L131	1-412-503-11	INDUCTOR	22uH		
L211	1-412-503-11	INDUCTOR	22uH		
L231	1-412-503-11	INDUCTOR	22uH		
L301	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L311	1-412-503-11	INDUCTOR	22uH		
L331	1-412-503-11	INDUCTOR	22uH		
		< TRANSISTOR >			
Q101	8-729-900-74	TRANSISTOR DTC143TS			
Q104	8-729-900-74	TRANSISTOR DTC143TS			
Q201	8-729-900-74	TRANSISTOR DTC143TS			
Q204	8-729-900-74	TRANSISTOR DTC143TS			
		< RESISTOR >			
R120	1-249-441-11	CARBON	100K	5%	1/4W
R121	1-249-441-11	CARBON	100K	5%	1/4W
R122	1-247-843-11	CARBON	3.3K	5%	1/4W
R123	1-247-863-00	CARBON	22K	5%	1/4W
R124	1-249-421-11	CARBON	2.2K	5%	1/4W
R125	1-249-421-11	CARBON	2.2K	5%	1/4W
R220	1-249-441-11	CARBON	100K	5%	1/4W
R221	1-249-441-11	CARBON	100K	5%	1/4W
R222	1-247-843-11	CARBON	3.3K	5%	1/4W
R223	1-247-863-00	CARBON	22K	5%	1/4W
R224	1-249-421-11	CARBON	2.2K	5%	1/4W
R225	1-249-421-11	CARBON	2.2K	5%	1/4W
R308	1-249-425-11	CARBON	4.7K	5%	1/4W
R309	1-249-426-11	CARBON	5.6K	5%	1/4W
R321	1-247-807-11	CARBON	100	5%	1/4W
**********					
*	1-671-493-11	OUTLET BOARD			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CONNECTOR >			
CNP606	1-564-321-00	PIN, CONNECTOR 2P			
* CNP607	1-770-314-11	PIN, CONNECTOR 2P			

Ref. No.	Part No.	Description			Remark
CNP608	1-564-321-00	PIN, CONNECTOR 2P			
		< FUSE >			
⚠F601	1-532-501-31	FUSE, TIME-LAG (T0.8AL/250V)			
**********					
*	1-671-064-11	POWER BOARD			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CAPACITOR >			
C501	1-101-005-00	CERAMIC	22000PF		50V
C502	1-136-169-00	FILM	0.22uF	5%	50V
C503	1-136-169-00	FILM	0.22uF	5%	50V
C504	1-101-005-00	CERAMIC	22000PF		50V
C505	1-136-169-00	FILM	0.22uF	5%	50V
		< CONNECTOR >			
CNP501	1-564-321-00	PIN, CONNECTOR 2P			
		< DIODE >			
D501	8-719-902-17	DIODE U15G			
D502	8-719-902-17	DIODE U15G			
D503	8-719-902-17	DIODE U15G			
D504	8-719-902-17	DIODE U15G			
		< FUSE >			
⚠F501	1-532-505-31	FUSE, TIME-LAG (T5AL/250V)			
		< LINE FILTER TRANSFORMER >			
⚠FL501	1-402-663-11	TRANSFORMER, LINE FILTER (LFT)			
		< CABLE HOLDER >			
* KH505	1-573-287-11	HOLDER, CABLE 2P			
		< TRANSFORMER >			
⚠T501	1-433-453-11	TRANSFORMER, POWER (SET)			
**********					
*	1-671-065-11	POWER AMP BOARD			
		**********			
		< CAPACITOR >			
C181	1-126-960-11	ELECT	1uF	20%	50V
C182	1-162-294-31	CERAMIC	0.001uF	10%	50V
C184	1-130-495-00	MYLAR	0.1uF	5%	50V
C185	1-130-495-00	MYLAR	0.1uF	5%	50V
C281	1-126-960-11	ELECT	1uF	20%	50V
C282	1-162-294-31	CERAMIC	0.001uF	10%	50V
C382	1-104-665-11	ELECT	100uF	20%	10V
C385	1-104-664-11	ELECT	47uF	20%	25V
C386	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
		< IC >			
IC309	8-759-333-16	IC LA4705NA			
		< RESISTOR >			
R181	1-249-427-11	CARBON	6.8K	5%	1/4W
R182	1-249-431-11	CARBON	15K	5%	1/4W
⚠R183	1-249-385-11	CARBON	2.2	5%	1/6W F
⚠R184	1-249-385-11	CARBON	2.2	5%	1/6W F
R281	1-249-427-11	CARBON	6.8K	5%	1/4W
R282	1-249-431-11	CARBON	15K	5%	1/4W
R381	1-249-425-11	CARBON	4.7K	5%	1/4W
R383	1-249-417-11	CARBON	1K	5%	1/4W
**********					
*	A-3321-617-A	RDS BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C401	1-124-234-00	ELECT	22uF	20%	16V
C402	1-124-257-00	ELECT	2.2uF	20%	50V
C403	1-124-234-00	ELECT	22uF	20%	16V
C404	1-124-584-00	ELECT	100uF	20%	10V
C405	1-102-516-11	CERAMIC	27PF	5%	50V
C406	1-102-516-11	CERAMIC	27PF	5%	50V
C407	1-162-291-31	CERAMIC	560PF	10%	50V
C408	1-162-288-31	CERAMIC	330PF	10%	50V
C409	1-162-306-11	CERAMIC	0.01uF	30%	16V
C410	1-162-306-11	CERAMIC	0.01uF	30%	16V
C411	1-162-306-11	CERAMIC	0.01uF	30%	16V
C412	1-162-306-11	CERAMIC	0.01uF	30%	16V
C413	1-162-306-11	CERAMIC	0.01uF	30%	16V
C414	1-102-962-00	CERAMIC	30PF	5%	50V
C415	1-102-962-00	CERAMIC	30PF	5%	50V
C416	1-162-306-11	CERAMIC	0.01uF	30%	16V
C417	1-162-306-11	CERAMIC	0.01uF	30%	16V
C418	1-162-306-11	CERAMIC	0.01uF	30%	16V
C419	1-162-306-11	CERAMIC	0.01uF	30%	16V
C422	1-162-306-11	CERAMIC	0.01uF	30%	16V
C431	1-162-306-11	CERAMIC	0.01uF	30%	16V
C434	1-162-282-31	CERAMIC	100PF	10%	50V
C435	1-162-282-31	CERAMIC	100PF	10%	50V
		< CONNECTOR >			
CNP401	1-691-078-41	HOUSING, CONNECTOR 19P			
CNP402	1-691-078-41	HOUSING, CONNECTOR 19P			
		< IC >			
IC401	8-752-899-17	IC CXP83413-047Q			
IC402	8-759-165-81	IC PST600D-T			
IC404	8-759-560-51	IC BU1924F			

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

RDS **RDS. LCD** **REGULATOR** **SW**

Ref. No.	Part No.	Description			Remark
		< COIL >			
L401	1-410-521-11	INDUCTOR	100uH		
L402	1-410-521-11	INDUCTOR	100uH		
L403	1-410-521-11	INDUCTOR	100uH		
L404	1-410-521-11	INDUCTOR	100uH		
L405	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q405	8-729-903-02	TRANSISTOR	DTA143XS		
Q407	8-729-029-66	TRANSISTOR	DTC114ESA		
		< RESISTOR >			
R401	1-249-429-11	CARBON	10K	5%	1/4W
R402	1-249-429-11	CARBON	10K	5%	1/4W
R403	1-249-429-11	CARBON	10K	5%	1/4W
R404	1-249-429-11	CARBON	10K	5%	1/4W
R405	1-249-429-11	CARBON	10K	5%	1/4W
R406	1-249-429-11	CARBON	10K	5%	1/4W
R407	1-249-429-11	CARBON	10K	5%	1/4W
R408	1-249-429-11	CARBON	10K	5%	1/4W
R409	1-249-429-11	CARBON	10K	5%	1/4W
R410	1-249-429-11	CARBON	10K	5%	1/4W
R411	1-249-429-11	CARBON	10K	5%	1/4W
R412	1-249-429-11	CARBON	10K	5%	1/4W
R413	1-249-429-11	CARBON	10K	5%	1/4W
R414	1-249-429-11	CARBON	10K	5%	1/4W
R415	1-249-429-11	CARBON	10K	5%	1/4W
R416	1-249-429-11	CARBON	10K	5%	1/4W
R417	1-249-429-11	CARBON	10K	5%	1/4W
R418	1-249-429-11	CARBON	10K	5%	1/4W
R419	1-249-429-11	CARBON	10K	5%	1/4W
R420	1-249-429-11	CARBON	10K	5%	1/4W
R421	1-249-429-11	CARBON	10K	5%	1/4W
R422	1-249-429-11	CARBON	10K	5%	1/4W
R423	1-249-429-11	CARBON	10K	5%	1/4W
R424	1-249-429-11	CARBON	10K	5%	1/4W
R425	1-249-429-11	CARBON	10K	5%	1/4W
R426	1-249-429-11	CARBON	10K	5%	1/4W
R427	1-249-429-11	CARBON	10K	5%	1/4W
R428	1-249-429-11	CARBON	10K	5%	1/4W
R429	1-249-429-11	CARBON	10K	5%	1/4W
R430	1-249-429-11	CARBON	10K	5%	1/4W
R431	1-249-429-11	CARBON	10K	5%	1/4W
R432	1-249-429-11	CARBON	10K	5%	1/4W
R433	1-249-429-11	CARBON	10K	5%	1/4W
R434	1-249-429-11	CARBON	10K	5%	1/4W
R435	1-249-429-11	CARBON	10K	5%	1/4W
R436	1-249-429-11	CARBON	10K	5%	1/4W
R437	1-249-429-11	CARBON	10K	5%	1/4W
R438	1-249-429-11	CARBON	10K	5%	1/4W
R439	1-249-429-11	CARBON	10K	5%	1/4W
R440	1-249-432-11	CARBON	18K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R441	1-249-417-11	CARBON	1K	5%	1/4W
R442	1-249-417-11	CARBON	1K	5%	1/4W
R443	1-249-417-11	CARBON	1K	5%	1/4W
R449	1-249-429-11	CARBON	10K	5%	1/4W
R451	1-249-428-11	CARBON	8.2K	5%	1/4W
R453	1-247-807-11	CARBON	100	5%	1/4W
R454	1-247-807-11	CARBON	100	5%	1/4W
R479	1-249-421-11	CARBON	2.2K	5%	1/4W
		< VIBRATOR >			
X402	1-579-825-11	VIBRATOR, CERAMIC (2.62MHz)			
X403	1-760-556-11	VIBRATOR, CRYSTAL (4.332MHz)			
**********					
*	1-671-496-11	RDS.LCD BOARD			
		**********			
	1-783-983-11	WIRE, PARALLEL (19 CORE)			
	3-028-490-01	ILLUMINATOR (RDS)			
	3-028-492-01	HOLDER (RDS), LCD			
	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S			
		< CONNECTOR >			
CNP403	1-691-051-21	HOUSING, CONNECTOR 19P			
CNP404	1-691-051-21	HOUSING, CONNECTOR 19P			
		< LIQUID CRYSTAL DISPLAY >			
LCD401	1-803-161-11	DISPLAY PANEL, LIQUID CRYSTAL (RDS)			
**********					
*	1-672-059-11	REGULATOR BOARD			
		**********			
		< CAPACITOR >			
C391	1-162-306-11	CERAMIC	0.01uF	30%	16V
C392	1-162-306-11	CERAMIC	0.01uF	30%	16V
C393	1-162-306-11	CERAMIC	0.01uF	30%	16V
C394	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CNP312	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P			
		< TRANSISTOR >			
Q315	8-729-209-15	TRANSISTOR	2SD2012		
Q318	8-729-209-15	TRANSISTOR	2SD2012		
**********					
*	1-662-742-11	SW BOARD			
		**********			
		< CONNECTOR >			
* CN691	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P			

Ref. No.	Part No.	Description			Remark
		< PHOTO REFLECTOR >			
PH691	1-801-455-11	PHOTO REFLECTOR			
		< RESISTOR >			
R691	1-247-827-11	CARBON	680	5%	1/4W
		< SWITCH >			
S691	1-762-811-11	SWITCH, LEAF (HALF (CASSETTE))			
S694	1-762-811-11	SWITCH, LEAF (REC-REV (ERASE PROOF))			
S695	1-762-811-11	SWITCH, LEAF (REC-FWD (ERASE PROOF))			
S696	1-762-810-11	SWITCH, LEAF (MODE (HEAD POSITION))			
**********					
*	1-671-485-11	SW1 BOARD **********			
		< CAPACITOR >			
C902	1-162-282-31	CERAMIC	100PF	10%	50V
C903	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
CNP901	1-770-398-11	HOUSING, CONNECTOR (PC BOARD) 5P			
CNP902	1-770-396-11	HOUSING, CONNECTOR (PC BOARD) 3P			
		< IC >			
IC901	8-759-471-49	IC NJL57H400			
		< RESISTOR >			
R950	1-249-415-11	CARBON	680	5%	1/4W
R951	1-249-416-11	CARBON	820	5%	1/4W
R952	1-249-418-11	CARBON	1.2K	5%	1/4W
R953	1-249-420-11	CARBON	1.8K	5%	1/4W
R954	1-247-843-11	CARBON	3.3K	5%	1/4W
R955	1-249-427-11	CARBON	6.8K	5%	1/4W
R956	1-249-415-11	CARBON	680	5%	1/4W
R957	1-249-416-11	CARBON	820	5%	1/4W
R958	1-249-418-11	CARBON	1.2K	5%	1/4W
R959	1-249-420-11	CARBON	1.8K	5%	1/4W
R960	1-247-843-11	CARBON	3.3K	5%	1/4W
R961	1-249-427-11	CARBON	6.8K	5%	1/4W
R962	1-249-415-11	CARBON	680	5%	1/4W
R963	1-249-416-11	CARBON	820	5%	1/4W
R964	1-249-418-11	CARBON	1.2K	5%	1/4W
R965	1-249-420-11	CARBON	1.8K	5%	1/4W
R966	1-247-843-11	CARBON	3.3K	5%	1/4W
R967	1-249-427-11	CARBON	6.8K	5%	1/4W
		< SWITCH >			
S901	1-692-014-11	SWITCH, KEY BOARD (▶▶)			
S902	1-692-014-11	SWITCH, KEY BOARD (◀◀)			
S903	1-692-014-11	SWITCH, KEY BOARD (► (TAPE))			
S904	1-692-014-11	SWITCH, KEY BOARD (■ (TAPE))			

Ref. No.	Part No.	Description			Remark
S905	1-692-014-11	SWITCH, KEY BOARD (◄ (TAPE))			
S906	1-692-014-11	SWITCH, KEY BOARD (● / ❚❚)			
S907	1-692-014-11	SWITCH, KEY BOARD (DIR MODE)			
S908	1-692-014-11	SWITCH, KEY BOARD (■ (CD))			
S909	1-692-014-11	SWITCH, KEY BOARD (❚❚ (CD))			
S910	1-692-014-11	SWITCH, KEY BOARD (► (CD))			
S911	1-692-014-11	SWITCH, KEY BOARD (FUNCTION)			
S912	1-692-014-11	SWITCH, KEY BOARD (OPERATE)			
S913	1-692-014-11	SWITCH, KEY BOARD (DISPLAY ENTER/MEM)			
S914	1-692-014-11	SWITCH, KEY BOARD (VOLUME +)			
S915	1-692-014-11	SWITCH, KEY BOARD (VOLUME –)			
S916	1-692-014-11	SWITCH, KEY BOARD (▶▶I, TUNE +)			
S917	1-692-014-11	SWITCH, KEY BOARD (I◀◀, TUNE –)			
S918	1-692-014-11	SWITCH, KEY BOARD (BAND (RADIO))			
S919	1-692-014-11	SWITCH, KEY BOARD (PRESET + (RADIO))			
S920	1-692-014-11	SWITCH, KEY BOARD (PRESET – (RADIO))			
**********					
*	1-671-486-11	SW2 BOARD **********			
		< RESISTOR >			
R970	1-249-415-11	CARBON	680	5%	1/4W
R971	1-249-416-11	CARBON	820	5%	1/4W
		< SWITCH >			
S921	1-692-014-11	SWITCH, KEY BOARD (SOUND)			
S922	1-692-014-11	SWITCH, KEY BOARD (PGM SET AUTO PRESET)			
S923	1-692-014-11	SWITCH, KEY BOARD (PLAY MODE MONO/ST ISS)			
**********					
*	A-3321-588-A	SYSTEM BOARD, COMPLETE **********			
	3-028-260-01	HOLDER, LCD			
	3-028-491-01	ILLUMINATOR			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 N-S			
		< CAPACITOR >			
C801	1-124-261-00	ELECT	10uF	20%	50V
C802	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C803	1-124-589-11	ELECT	47uF	20%	16V
C804	1-162-306-11	CERAMIC	0.01uF	30%	16V
C805	1-124-584-00	ELECT	100uF	20%	10V
C806	1-162-306-11	CERAMIC	0.01uF	30%	16V
C807	1-102-516-11	CERAMIC	27PF	5%	50V
C808	1-102-516-11	CERAMIC	27PF	5%	50V
C809	1-161-494-00	CERAMIC	0.022uF		25V
C810	1-124-261-00	ELECT	10uF	20%	50V
C811	1-104-664-11	ELECT	47uF	20%	10V
C813	1-162-306-11	CERAMIC	0.01uF	30%	16V
C814	1-162-306-11	CERAMIC	0.01uF	30%	16V
C815	1-162-306-11	CERAMIC	0.01uF	30%	16V
C816	1-162-306-11	CERAMIC	0.01uF	30%	16V

SYSTEM

Ref. No.	Part No.	Description			Remark
C817	1-102-518-11	CERAMIC	33PF	5%	50V
C818	1-102-516-11	CERAMIC	27PF	5%	50V
C819	1-102-516-11	CERAMIC	27PF	5%	50V
C820	1-102-518-11	CERAMIC	33PF	5%	50V
C821	1-162-306-11	CERAMIC	0.01uF	30%	16V
C822	1-162-306-11	CERAMIC	0.01uF	30%	16V
C823	1-162-282-31	CERAMIC	100PF	10%	50V
C824	1-162-282-31	CERAMIC	100PF	10%	50V
C825	1-162-282-31	CERAMIC	100PF	10%	50V
C826	1-162-282-31	CERAMIC	100PF	10%	50V
C827	1-162-282-31	CERAMIC	100PF	10%	50V
C829	1-162-282-31	CERAMIC	100PF	10%	50V
C830	1-162-282-31	CERAMIC	100PF	10%	50V
C831	1-162-282-31	CERAMIC	100PF	10%	50V
C832	1-162-282-31	CERAMIC	100PF	10%	50V
C833	1-162-282-31	CERAMIC	100PF	10%	50V
C834	1-162-282-31	CERAMIC	100PF	10%	50V
C835	1-162-282-31	CERAMIC	100PF	10%	50V
C836	1-162-282-31	CERAMIC	100PF	10%	50V
C837	1-162-282-31	CERAMIC	100PF	10%	50V
C838	1-162-282-31	CERAMIC	100PF	10%	50V
C839	1-162-306-11	CERAMIC	0.01uF	30%	16V
C841	1-162-306-11	CERAMIC	0.01uF	30%	16V
C842	1-162-306-11	CERAMIC	0.01uF	30%	16V
C843	1-162-306-11	CERAMIC	0.01uF	30%	16V
C844	1-162-306-11	CERAMIC	0.01uF	30%	16V
C845	1-162-282-31	CERAMIC	100PF	10%	50V
C846	1-162-306-11	CERAMIC	0.01uF	30%	16V
C847	1-162-306-11	CERAMIC	0.01uF	30%	16V
C848	1-162-306-11	CERAMIC	0.01uF	30%	16V
C849	1-162-282-31	CERAMIC	100PF	10%	50V
C850	1-162-282-31	CERAMIC	100PF	10%	50V
C851	1-162-282-31	CERAMIC	100PF	10%	50V
C852	1-162-306-11	CERAMIC	0.01uF	30%	16V
C853	1-162-282-31	CERAMIC	100PF	10%	50V
C854	1-162-282-31	CERAMIC	100PF	10%	50V
C855	1-162-282-31	CERAMIC	100PF	10%	50V
C856	1-162-282-31	CERAMIC	100PF	10%	50V
C857	1-162-306-11	CERAMIC	0.01uF	30%	16V
C858	1-124-261-00	ELECT	10uF	20%	50V
C859	1-162-306-11	CERAMIC	0.01uF	30%	16V
C860	1-162-306-11	CERAMIC	0.01uF	30%	16V
C861	1-162-306-11	CERAMIC	0.01uF	30%	16V
C863	1-162-306-11	CERAMIC	0.01uF	30%	16V
C866	1-126-964-11	ELECT	10uF	20%	50V
C867	1-162-306-11	CERAMIC	0.01uF	30%	16V
C868	1-162-306-11	CERAMIC	0.01uF	30%	16V
C869	1-162-306-11	CERAMIC	0.01uF	30%	16V
C901	1-104-664-11	ELECT	47uF	20%	10V
		< CONNECTOR >			
CNP801	1-774-493-11	CONNECTOR, FFC/FPC 27P			
CNP802	1-770-389-11	PIN, CONNECTOR (PC BOARD) 5P			
CNP803	1-770-387-11	PIN, CONNECTOR (PC BOARD) 3P			
* CNP804	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CNP805	1-568-852-11	CONNECTOR, FFC/FPC 9P			
* CNP806	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CNP808	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< DIODE >			
D801	8-719-991-33	DIODE 1SS133T-77			
D802	8-719-991-33	DIODE 1SS133T-77			
D803	8-719-991-33	DIODE 1SS133T-77			
D804	8-719-991-33	DIODE 1SS133T-77			
D805	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC801	8-752-899-66	IC CXP83120A-022Q			
IC802	8-759-553-50	IC S-81256PG-Z			
IC803	8-759-511-42	IC S-80730AN			
		< COIL >			
L801	1-408-117-00	INDUCTOR	10uH		
L802	1-412-832-11	INDUCTOR	1uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-803-162-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q801	8-729-194-57	TRANSISTOR 2SC945-P			
Q802	8-729-922-66	TRANSISTOR 2SC2410SN			
Q803	8-729-922-66	TRANSISTOR 2SC2410SN			
Q804	8-729-900-80	TRANSISTOR DTC114ES			
Q805	8-729-801-84	TRANSISTOR 2SB1013-4			
		< RESISTOR >			
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-417-11	CARBON	1K	5%	1/4W
R803	1-249-417-11	CARBON	1K	5%	1/4W
R804	1-249-417-11	CARBON	1K	5%	1/4W
R805	1-249-417-11	CARBON	1K	5%	1/4W
R806	1-249-417-11	CARBON	1K	5%	1/4W
R807	1-249-429-11	CARBON	10K	5%	1/4W
R808	1-249-417-11	CARBON	1K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R810	1-249-417-11	CARBON	1K	5%	1/4W
R811	1-249-417-11	CARBON	1K	5%	1/4W
R812	1-249-429-11	CARBON	10K	5%	1/4W
R813	1-249-429-11	CARBON	10K	5%	1/4W
R814	1-249-429-11	CARBON	10K	5%	1/4W
R815	1-249-417-11	CARBON	1K	5%	1/4W
R816	1-249-429-11	CARBON	10K	5%	1/4W
R818	1-249-417-11	CARBON	1K	5%	1/4W
R819	1-249-417-11	CARBON	1K	5%	1/4W
R820	1-249-417-11	CARBON	1K	5%	1/4W
R821	1-249-417-11	CARBON	1K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R822	1-249-429-11	CARBON	10K	5%	1/4W
R823	1-249-429-11	CARBON	10K	5%	1/4W
R824	1-249-417-11	CARBON	1K	5%	1/4W
R825	1-249-417-11	CARBON	1K	5%	1/4W
R826	1-249-413-11	CARBON	470	5%	1/4W
R827	1-249-413-11	CARBON	470	5%	1/4W
R828	1-249-417-11	CARBON	1K	5%	1/4W
R829	1-249-417-11	CARBON	1K	5%	1/4W
R830	1-249-429-11	CARBON	10K	5%	1/4W
R831	1-249-429-11	CARBON	10K	5%	1/4W
R832	1-249-425-11	CARBON	4.7K	5%	1/4W
R833	1-249-425-11	CARBON	4.7K	5%	1/4W
R834	1-249-429-11	CARBON	10K	5%	1/4W
R835	1-249-429-11	CARBON	10K	5%	1/4W
R836	1-249-429-11	CARBON	10K	5%	1/4W
R837	1-249-417-11	CARBON	1K	5%	1/4W
R841	1-249-429-11	CARBON	10K	5%	1/4W
R842	1-249-429-11	CARBON	10K	5%	1/4W
R843	1-249-429-11	CARBON	10K	5%	1/4W
R844	1-249-432-11	CARBON	18K	5%	1/4W
R845	1-249-411-11	CARBON	330	5%	1/4W
R846	1-249-429-11	CARBON	10K	5%	1/4W
R847	1-249-417-11	CARBON	1K	5%	1/4W
R848	1-249-417-11	CARBON	1K	5%	1/4W
R849	1-249-417-11	CARBON	1K	5%	1/4W
R850	1-249-417-11	CARBON	1K	5%	1/4W
R851	1-249-417-11	CARBON	1K	5%	1/4W
R852	1-249-417-11	CARBON	1K	5%	1/4W
R853	1-249-417-11	CARBON	1K	5%	1/4W
R854	1-249-437-11	CARBON	47K	5%	1/4W
R855	1-249-417-11	CARBON	1K	5%	1/4W
R856	1-249-425-11	CARBON	4.7K	5%	1/4W
R857	1-249-425-11	CARBON	4.7K	5%	1/4W
R858	1-249-425-11	CARBON	4.7K	5%	1/4W
R859	1-249-425-11	CARBON	4.7K	5%	1/4W
R866	1-249-441-11	CARBON	100K	5%	1/4W
R867	1-249-417-11	CARBON	1K	5%	1/4W
R868	1-249-441-11	CARBON	100K	5%	1/4W
R869	1-249-428-11	CARBON	8.2K	5%	1/4W
R872	1-249-429-11	CARBON	10K	5%	1/4W
R873	1-249-437-11	CARBON	47K	5%	1/4W
R877	1-249-437-11	CARBON	47K	5%	1/4W
R880	1-249-437-11	CARBON	47K	5%	1/4W
R881	1-249-437-11	CARBON	47K	5%	1/4W
R882	1-249-425-11	CARBON	4.7K	5%	1/4W
R898	1-249-387-11	CARBON	3.3	5%	1/4W
R899	1-249-387-11	CARBON	3.3	5%	1/4W
R900	1-249-417-11	CARBON	1K	5%	1/4W
R901	1-249-417-11	CARBON	1K	5%	1/4W
R902	1-249-417-11	CARBON	1K	5%	1/4W
R903	1-249-417-11	CARBON	1K	5%	1/4W
R904	1-249-417-11	CARBON	1K	5%	1/4W
R905	1-249-417-11	CARBON	1K	5%	1/4W
R906	1-249-417-11	CARBON	1K	5%	1/4W
R907	1-249-417-11	CARBON	1K	5%	1/4W
R908	1-249-417-11	CARBON	1K	5%	1/4W
R909	1-249-417-11	CARBON	1K	5%	1/4W
R910	1-249-417-11	CARBON	1K	5%	1/4W
R911	1-249-417-11	CARBON	1K	5%	1/4W
R912	1-249-417-11	CARBON	1K	5%	1/4W
R913	1-249-417-11	CARBON	1K	5%	1/4W
R914	1-249-417-11	CARBON	1K	5%	1/4W
R915	1-249-417-11	CARBON	1K	5%	1/4W
R916	1-249-417-11	CARBON	1K	5%	1/4W
R917	1-249-417-11	CARBON	1K	5%	1/4W
R918	1-249-417-11	CARBON	1K	5%	1/4W
R919	1-249-417-11	CARBON	1K	5%	1/4W
R920	1-249-417-11	CARBON	1K	5%	1/4W
R921	1-249-417-11	CARBON	1K	5%	1/4W
R922	1-249-417-11	CARBON	1K	5%	1/4W
R923	1-249-417-11	CARBON	1K	5%	1/4W
R924	1-249-417-11	CARBON	1K	5%	1/4W
R925	1-249-417-11	CARBON	1K	5%	1/4W
R926	1-249-417-11	CARBON	1K	5%	1/4W
R927	1-249-417-11	CARBON	1K	5%	1/4W

< VIBRATOR >

X801	1-760-105-11	VIBRATOR, CRYSTAL (32.768kHz)			
X802	1-767-184-11	VIBRATOR, CERAMIC (4.19MHz)			

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*	1-671-066-11	TERMINAL BOARD			

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< CAPACITOR >

C284	1-130-495-00	MYLAR	0.1uF	5%	50V
C285	1-130-495-00	MYLAR	0.1uF	5%	50V
C381	1-126-946-11	ELECT	6800uF	20%	25V

< CONNECTOR >

* CNP503	1-506-946-11	PIN, CONNECTOR 4P			
* CNP504	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CNP505	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			

< CABLE HOLDER >

* KH510	1-565-385-11	HOLDER, CABLE 4P			
* KH512	1-573-287-11	HOLDER, CABLE 2P			

< FERRITE BEAD >

L501	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		

< RESISTOR >

⚠R283	1-249-385-11	CARBON	2.2	5%	1/6W F
⚠R284	1-249-385-11	CARBON	2.2	5%	1/6W F

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The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

TUNER

Ref. No.	Part No.	Description			Remark
*	A-3321-585-A	TUNER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-162-306-11	CERAMIC	0.01uF	30%	16V
C2	1-162-294-31	CERAMIC	0.001uF	10%	50V
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V
C4	1-130-483-00	MYLAR	0.01uF	5%	50V
C6	1-162-306-11	CERAMIC	0.01uF	30%	16V
C7	1-162-282-31	CERAMIC	100PF	10%	50V
C8	1-162-306-11	CERAMIC	0.01uF	30%	16V
C9	1-162-306-11	CERAMIC	0.01uF	30%	16V
C10	1-162-306-11	CERAMIC	0.01uF	30%	16V
C11	1-104-665-11	ELECT	100uF	20%	10V
C12	1-126-963-11	ELECT	4.7uF	20%	50V
C13	1-162-215-31	CERAMIC	47PF	5%	50V
C15	1-162-306-11	CERAMIC	0.01uF	30%	16V
C16	1-162-306-11	CERAMIC	0.01uF	30%	16V
C17	1-162-306-11	CERAMIC	0.01uF	30%	16V
C18	1-161-057-00	CERAMIC	0.033uF	10%	50V
C19	1-161-057-00	CERAMIC	0.033uF	10%	50V
C20	1-126-964-11	ELECT	10uF	20%	50V
C21	1-126-964-11	ELECT	10uF	20%	50V
C22	1-162-850-11	CERAMIC	0.082uF	10%	16V
C23	1-162-849-11	CERAMIC	0.068uF	10%	16V
C24	1-162-850-11	CERAMIC	0.082uF	10%	16V
C25	1-126-964-11	ELECT	10uF	20%	50V
C26	1-162-288-31	CERAMIC	330PF	10%	50V
C29	1-162-286-21	CERAMIC	220PF	10%	50V
C30	1-162-290-31	CERAMIC	470PF	10%	50V
C31	1-136-177-00	FILM	1uF	5%	50V
C32	1-162-294-31	CERAMIC	0.001uF	10%	50V
C33	1-161-494-00	CERAMIC	0.022uF		25V
C40	1-102-518-11	CERAMIC	33PF	5%	50V
C41	1-162-203-31	CERAMIC	15PF	5%	50V
C42	1-162-306-11	CERAMIC	0.01uF	30%	16V
C43	1-162-282-31	CERAMIC	100PF	10%	50V
C44	1-162-306-11	CERAMIC	0.01uF	30%	16V
C45	1-162-306-11	CERAMIC	0.01uF	30%	16V
C46	1-162-306-11	CERAMIC	0.01uF	30%	16V
C47	1-162-306-11	CERAMIC	0.01uF	30%	16V
C48	1-162-294-31	CERAMIC	0.001uF	10%	50V
C49	1-162-294-31	CERAMIC	0.001uF	10%	50V
C50	1-162-294-31	CERAMIC	0.001uF	10%	50V
C51	1-162-306-11	CERAMIC	0.01uF	30%	16V
C52	1-126-964-11	ELECT	10uF	20%	50V
C53	1-162-306-11	CERAMIC	0.01uF	30%	16V
C54	1-126-964-11	ELECT	10uF	20%	50V
C55	1-136-177-00	FILM	1uF	5%	50V
C56	1-162-306-11	CERAMIC	0.01uF	30%	16V
C60	1-161-772-11	CERAMIC	0.1uF	10%	25V
C61	1-162-291-31	CERAMIC	560PF	10%	50V
C62	1-162-207-31	CERAMIC	22PF	5%	50V
C63	1-161-772-11	CERAMIC	0.1uF	10%	25V
C64	1-162-306-11	CERAMIC	0.01uF	30%	16V
C65	1-162-306-11	CERAMIC	0.01uF	30%	16V
C66	1-130-495-00	MYLAR	0.1uF	5%	50V
C69	1-161-494-00	CERAMIC	0.022uF		25V
C70	1-136-356-11	FILM	470PF	5%	63V
C72	1-162-282-31	CERAMIC	100PF	10%	50V
C73	1-162-306-11	CERAMIC	0.01uF	30%	16V
C74	1-162-306-11	CERAMIC	0.01uF	30%	16V
C75	1-162-281-31	CERAMIC	91PF	10%	50V
C76	1-162-306-11	CERAMIC	0.01uF	30%	16V
C83	1-162-288-31	CERAMIC	330PF	10%	50V
C84	1-162-306-11	CERAMIC	0.01uF	30%	16V
C85	1-124-907-11	ELECT	10uF	20%	50V
C86	1-162-294-31	CERAMIC	0.001uF	10%	50V
C87	1-162-306-11	CERAMIC	0.01uF	30%	16V
C88	1-162-306-11	CERAMIC	0.01uF	30%	16V
C89	1-126-964-11	ELECT	10uF	20%	50V
C90	1-162-282-31	CERAMIC	100PF	10%	50V
C91	1-162-282-31	CERAMIC	100PF	10%	50V
C93	1-162-306-11	CERAMIC	0.01uF	30%	16V
C95	1-162-282-31	CERAMIC	100PF	10%	50V
C96	1-162-294-31	CERAMIC	0.001uF	10%	50V
C99	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< FILTER >			
CF1	1-760-468-11	FILTER, CERAMIC			
CF2	1-760-468-11	FILTER, CERAMIC			
CF3	1-760-468-11	FILTER, CERAMIC			
CF4	1-767-096-11	VIBRATOR, CERAMIC			
		< ENCAPSULATED COMPONENT >			
CFT1	1-239-173-11	ENCAPSULATED COMPONENT			
		< CONNECTOR >			
CNP1	1-778-310-11	PLUG, CONNECTOR 2P			
CNP2	1-779-535-11	CONNECTOR, COAXIAL (EXT ANT FM)			
* CNP3	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CNP4	1-573-844-11	CONNECTOR, BOARD TO BOARD 12P			
		< TRIMMER >			
CT4	1-141-410-11	CAP, ADJ	10PF		
CT5	1-141-439-21	CAP, ADJ	50PF		
		< DIODE >			
D5	8-719-976-30	DIODE KV1560N			
D90	8-719-991-33	DIODE 1SS133T-77			
D91	8-719-991-33	DIODE 1SS133T-77			
D92	8-719-991-33	DIODE 1SS133T-77			
D93	8-719-991-33	DIODE 1SS133T-77			
D94	8-719-991-33	DIODE 1SS133T-77			
D95	8-719-991-33	DIODE 1SS133T-77			
D96	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description			Remark
D97	8-719-991-33	DIODE 1SS133T-77			
D98	8-719-991-33	DIODE 1SS133T-77			
D99	8-719-991-33	DIODE 1SS133T-77			
		< BAND PASS FILTER >			
FL1	1-236-711-21	FILTER, BAND PASS			
		< IC >			
IC1	8-759-386-02	IC TA2008AN			
IC2	8-759-290-61	IC BU2615S			
		< COIL >			
L3	1-416-248-11	COIL, MW RF			
L4	1-416-247-11	COIL (OSC)			
L5	1-416-249-11	COIL, LW RF			
L6	1-412-514-11	INDUCTOR	220uH		
L40	1-412-514-11	INDUCTOR	220uH		
		< CONNECTOR >			
* P1	1-564-187-00	PIN, CONNECTOR			
		< TRANSISTOR >			
Q1	8-729-905-50	TRANSISTOR DTC343TS			
Q2	8-729-905-50	TRANSISTOR DTC343TS			
Q3	8-729-922-66	TRANSISTOR 2SC2410SN			
Q4	8-729-922-66	TRANSISTOR 2SC2410SN			
Q5	8-729-178-62	TRANSISTOR 2SC2786-L			
Q6	8-729-119-32	FET 2SK193			
Q7	8-729-922-66	TRANSISTOR 2SC2410SN			
Q8	8-729-904-39	TRANSISTOR DTC114TS			
Q9	8-729-115-80	TRANSISTOR BA1A4P			
Q10	8-729-115-80	TRANSISTOR BA1A4P			
Q11	8-729-115-80	TRANSISTOR BA1A4P			
Q12	8-729-115-80	TRANSISTOR BA1A4P			
Q13	8-729-012-83	FET 2SK679A			
Q17	8-729-029-23	TRANSISTOR DTA114TSA-TP			
Q21	8-729-422-57	TRANSISTOR BA1A4M			
Q22	8-729-422-57	TRANSISTOR BA1A4M			
Q24	8-729-422-57	TRANSISTOR BA1A4M			
Q25	8-729-029-68	TRANSISTOR DTC114TSA			
Q26	8-729-029-66	TRANSISTOR DTC114ESA			
Q27	8-729-029-55	TRANSISTOR DTA143ZSA			
Q28	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q30	8-729-115-80	TRANSISTOR BA1A4P			
Q31	8-729-422-57	TRANSISTOR BA1A4M			
Q32	8-729-115-80	TRANSISTOR BA1A4P			
Q33	8-729-115-80	TRANSISTOR BA1A4P			
		< RESISTOR >			
R1	1-249-417-11	CARBON	1K	5%	1/4W
R2	1-249-411-11	CARBON	330	5%	1/4W
R3	1-247-791-00	CARBON	22	5%	1/4W
R10	1-249-403-11	CARBON	68	5%	1/4W

Ref. No.	Part No.	Description			Remark
R11	1-249-425-11	CARBON	4.7K	5%	1/4W
R13	1-249-407-11	CARBON	150	5%	1/4W
R14	1-249-437-11	CARBON	47K	5%	1/4W
R15	1-249-399-11	CARBON	33	5%	1/4W
R16	1-249-411-11	CARBON	330	5%	1/4W
R17	1-249-421-11	CARBON	2.2K	5%	1/4W
R18	1-249-393-11	CARBON	10	5%	1/4W
R19	1-247-863-00	CARBON	22K	5%	1/4W
R21	1-247-863-00	CARBON	22K	5%	1/4W
R22	1-249-421-11	CARBON	2.2K	5%	1/4W
R23	1-249-421-11	CARBON	2.2K	5%	1/4W
R25	1-249-425-11	CARBON	4.7K	5%	1/4W
R26	1-249-425-11	CARBON	4.7K	5%	1/4W
R27	1-249-425-11	CARBON	4.7K	5%	1/4W
R28	1-249-425-11	CARBON	4.7K	5%	1/4W
R29	1-249-417-11	CARBON	1K	5%	1/4W
R30	1-249-441-11	CARBON	100K	5%	1/4W
R40	1-249-429-11	CARBON	10K	5%	1/4W
R41	1-249-429-11	CARBON	10K	5%	1/4W
R42	1-249-429-11	CARBON	10K	5%	1/4W
R43	1-249-429-11	CARBON	10K	5%	1/4W
R44	1-249-417-11	CARBON	1K	5%	1/4W
R45	1-249-417-11	CARBON	1K	5%	1/4W
R46	1-249-417-11	CARBON	1K	5%	1/4W
R47	1-249-417-11	CARBON	1K	5%	1/4W
R49	1-249-412-11	CARBON	390	5%	1/4W
R50	1-249-415-11	CARBON	680	5%	1/4W
R51	1-249-417-11	CARBON	1K	5%	1/4W
R52	1-249-427-11	CARBON	6.8K	5%	1/4W
R53	1-247-863-00	CARBON	22K	5%	1/4W
R54	1-249-417-11	CARBON	1K	5%	1/4W
R55	1-249-437-11	CARBON	47K	5%	1/4W
R56	1-249-437-11	CARBON	47K	5%	1/4W
R57	1-249-437-11	CARBON	47K	5%	1/4W
R59	1-247-843-11	CARBON	3.3K	5%	1/4W
R60	1-249-429-11	CARBON	10K	5%	1/4W
R61	1-249-425-11	CARBON	4.7K	5%	1/4W
R62	1-249-425-11	CARBON	4.7K	5%	1/4W
R63	1-249-441-11	CARBON	100K	5%	1/4W
R64	1-247-887-00	CARBON	220K	5%	1/4W
R65	1-249-411-11	CARBON	330	5%	1/4W
R66	1-249-413-11	CARBON	470	5%	1/4W
R67	1-249-429-11	CARBON	10K	5%	1/4W
R70	1-249-425-11	CARBON	4.7K	5%	1/4W
R71	1-249-425-11	CARBON	4.7K	5%	1/4W
R72	1-249-425-11	CARBON	4.7K	5%	1/4W
R73	1-247-887-00	CARBON	220K	5%	1/4W
R74	1-249-416-11	CARBON	820	5%	1/4W
R75	1-247-887-00	CARBON	220K	5%	1/4W
R76	1-249-441-11	CARBON	100K	5%	1/4W
R77	1-247-887-00	CARBON	220K	5%	1/4W
R78	1-249-417-11	CARBON	1K	5%	1/4W
R79	1-249-429-11	CARBON	10K	5%	1/4W

TUNER S/WOOFER AMP

Ref. No.	Part No.	Description			Remark
R81	1-249-417-11	CARBON	1K	5%	1/4W
		< ENCAPSULATED COMPONENT >			
T1	1-233-306-31	ENCAPSULATED COMPONENT			
		< TUNER >			
* TU1	1-693-378-11	TUNER UNIT			
		< VIBRATOR >			
X1	1-760-130-11	VIBRATOR, CRYSTAL (75kHz)			
**********					
*	A-3321-676-A	S/WOOFER AMP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C601	1-136-165-00	MYLAR	0.1uF	5%	50V
C604	1-126-933-11	ELECT	100uF	20%	16V
C605	1-126-964-11	ELECT	10uF	20%	50V
C606	1-126-963-11	ELECT	4.7uF	20%	50V
C607	1-126-960-11	ELECT	1uF	20%	50V
C608	1-136-495-11	FILM	0.068uF	5%	50V
C609	1-126-942-61	ELECT	1000uF	20%	25V
C610	1-136-495-11	FILM	0.068uF	5%	50V
C611	1-137-194-00	FILM	0.47uF	5%	50V
C612	1-126-964-11	ELECT	10uF	20%	50V
C613	1-126-960-11	ELECT	1uF	20%	50V
C614	1-126-963-11	ELECT	4.7uF	20%	50V
C615	1-126-963-11	ELECT	4.7uF	20%	50V
C616	1-128-551-11	ELECT	22uF	20%	25V
C617	1-126-960-11	ELECT	1uF	20%	50V
C619	1-126-959-11	ELECT	0.47uF	20%	50V
C621	1-126-959-11	ELECT	0.47uF	20%	50V
C626	1-136-165-00	MYLAR	0.1uF	5%	50V
C627	1-126-941-11	ELECT	470uF	20%	25V
C633	1-124-584-00	ELECT	100uF	20%	10V
C668	1-126-955-11	ELECT	4700uF	20%	35V
C669	1-126-955-11	ELECT	4700uF	20%	35V
C697	1-136-169-00	FILM	0.22uF	5%	50V
C698	1-136-169-00	FILM	0.22uF	5%	50V
C699	1-136-169-00	FILM	0.22uF	5%	50V
		< CONNECTOR >			
CNP601	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CNP602	1-564-506-11	PLUG, CONNECTOR 3P			
* CNP603	1-564-505-11	PLUG, CONNECTOR 2P			
* CNP605	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< DIODE >			
D606	8-719-921-75	DIODE MTZN-10B			
D607	8-719-991-33	DIODE 1SS133T-77			
D608	8-719-991-33	DIODE 1SS133T-77			
D609	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description			Remark
		< JACK >			
J601	1-774-785-11	JACK, PIN 1P (SIGNAL INPUT WOOFER)			
		< TRANSISTOR >			
Q601	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q609	8-729-902-80	TRANSISTOR DTA114YS			
Q610	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q611	8-729-029-72	TRANSISTOR DTC114YSA			
Q612	8-729-142-46	TRANSISTOR 2SC2001-LK			
Q615	8-729-142-46	TRANSISTOR 2SC2001-LK			
		< RESISTOR >			
R601	1-249-389-11	CARBON	4.7	5%	1/4W
R604	1-249-413-11	CARBON	470	5%	1/4W
R606	1-247-863-31	CARBON	22K	5%	1/4W
R607	1-249-421-11	CARBON	2.2K	5%	1/4W
R608	1-249-441-11	CARBON	100K	5%	1/4W
R609	1-249-431-11	CARBON	15K	5%	1/4W
R610	1-249-441-11	CARBON	100K	5%	1/4W
R611	1-249-413-11	CARBON	470	5%	1/4W
R612	1-249-429-11	CARBON	10K	5%	1/4W
R613	1-249-421-11	CARBON	2.2K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-425-11	CARBON	4.7K	5%	1/4W
R617	1-247-895-00	CARBON	470K	5%	1/4W
R618	1-247-895-00	CARBON	470K	5%	1/4W
R619	1-247-895-00	CARBON	470K	5%	1/4W
R620	1-249-425-11	CARBON	4.7K	5%	1/4W
R621	1-249-437-11	CARBON	47K	5%	1/4W
R622	1-247-895-00	CARBON	470K	5%	1/4W
R623	1-249-421-11	CARBON	2.2K	5%	1/4W
R625	1-249-421-11	CARBON	2.2K	5%	1/4W
R626	1-249-429-11	CARBON	10K	5%	1/4W
⚠R627	1-219-112-11	FUSIBLE	10	5%	1/4W F
R628	1-249-419-11	CARBON	1.5K	5%	1/4W
R630	1-249-421-11	CARBON	2.2K	5%	1/4W
R631	1-249-411-11	CARBON	330	5%	1/4W
R633	1-247-843-11	CARBON	3.3K	5%	1/4W
R634	1-249-413-11	CARBON	470	5%	1/4W
R635	1-249-413-11	CARBON	470	5%	1/4W
R636	1-249-425-11	CARBON	4.7K	5%	1/4W
R637	1-249-425-11	CARBON	4.7K	5%	1/4W
R638	1-247-903-00	CARBON	1M	5%	1/4W
R640	1-249-417-11	CARBON	1K	5%	1/4W

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
R641	1-249-434-11	CARBON	27K	5%	1/4W
R642	1-249-441-11	CARBON	100K	5%	1/4W
R645	1-247-863-00	CARBON	22K	5%	1/4W
R646	1-249-432-11	CARBON	18K	5%	1/4W
R647	1-247-863-31	CARBON	22K	5%	1/4W
**********					
*	1-672-061-11	S/WOOFER AMP2 BOARD			
		**********			
		< CAPACITOR >			
C603	1-124-234-00	ELECT	22uF	20%	16V
C620	1-126-157-11	ELECT	10uF	20%	50V
C623	1-126-160-11	ELECT	1uF	20%	50V
		< IC >			
IC601	8-759-549-76	IC TDA2052V			
		< RESISTOR >			
R602	1-249-437-11	CARBON	47K	5%	1/4W
R603	1-249-411-11	CARBON	330	5%	1/4W
R605	1-247-863-00	CARBON	22K	5%	1/4W
R632	1-249-421-11	CARBON	2.2K	5%	1/4W
**********					
*	1-671-492-11	WOOFER POWER BOARD			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CAPACITOR >			
C661	1-101-005-00	CERAMIC	22000PF		50V
C662	1-101-005-00	CERAMIC	22000PF		50V
C663	1-101-005-00	CERAMIC	22000PF		50V
C664	1-101-005-00	CERAMIC	22000PF		50V
C665	1-101-005-00	CERAMIC	22000PF		50V
C666	1-101-005-00	CERAMIC	22000PF		50V
		< DIODE >			
D601	8-719-902-17	DIODE U15G			
D602	8-719-902-17	DIODE U15G			
D603	8-719-902-17	DIODE U15G			
D604	8-719-902-17	DIODE U15G			
		< FUSE >			
⚠F602	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)			
⚠F603	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)			
		< TRANSFORMER >			
⚠T601	1-433-450-11	TRANSFORMER, POWER (SUPER WOOFER)			
**********					

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
3	1-782-296-11	WIRE, PARALLEL (FFC) (27 CORE)	
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)	
111	1-452-732-11	MAGNET	
120	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
126	1-783-983-11	WIRE, PARALLEL (19 CORE)	
152	X-2626-202-2	CHASSIS ASSY (MB), MOTOR (SPINDLE) (INCLUDING M701)	
⚠154	8-848-483-08	PICK-UP, OPTICAL KSS-213C/Z-N	
⚠314	1-575-651-11	CORD, POWER (for SPEAKER (L)) (EXCEPT UK)	
⚠314	1-751-520-11	CORD, POWER (for SPEAKER (L)) (UK)	
319	1-790-161-11	CORD, SPEAKER (for SPEAKER (L))	
355	1-790-161-11	CORD, SPEAKER (for SPEAKER (R))	
⚠414	1-575-651-11	CORD, POWER (for WOOFER SPEAKER) (EXCEPT UK)	
⚠414	1-751-520-11	CORD, POWER (for WOOFER SPEAKER) (UK)	
⚠415	1-785-575-11	SOCKET, AC	
428	1-790-161-11	CORD, SPEAKER (for WOOFER SPEAKER)	
⚠F501	1-532-505-31	FUSE, TIME-LAG (T5AL/250V)	
⚠F601	1-532-501-31	FUSE, TIME-LAG (T0.8AL/250V)	
⚠F602	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
⚠F603	1-532-465-31	FUSE, TIME-LAG (T3.15AL/250V)	
HRPE101	1-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)	
M691	3-016-425-01	MOTOR ASSY (CAPSTAN/REEL) (including PULLEY)	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	
PM691	1-454-806-11	SOLENOID, PLUNGER	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (⏏ PUSH OPEN/CLOSE)	
SP101	1-505-607-11	SPEAKER (8cm) (L-CH)	
SP201	1-505-607-11	SPEAKER (8cm) (R-CH)	
SP601	1-529-134-11	SPEAKER (WOOFER)	
⚠T501	1-433-453-11	TRANSFORMER, POWER (SET)	
⚠T601	1-433-450-11	TRANSFORMER, POWER (SUPER WOOFER)	
**********			

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-501-594-11	ANTENNA (FM)	
	1-501-843-11	ANTENNA, LOOP (MW/LW)	
	1-590-478-11	CORD, CONNECTION (2P-2P) (for AUDIO)	
	1-783-971-11	CORD, CONNECTION (1P-1P) (for WOOFER)	
	3-864-718-11	MANUAL, INSTRUCTION (ENGLISH,SPANISH)	(AEP,UK,G)
	3-864-718-21	MANUAL, INSTRUCTION (FRENCH,GERMAN)	(AEP,G)
	3-864-718-31	MANUAL, INSTRUCTION (DUTCH,PORTUGUESE)	(AEP)
	3-864-718-41	MANUAL, INSTRUCTION (ITALIAN) (IT)	
	3-864-718-51	MANUAL, INSTRUCTION (SWEDISH,FINNISH)	(CET)
	3-864-718-61	MANUAL, INSTRUCTION (POLISH) (CET)	
	3-864-718-71	MANUAL, INSTRUCTION (CZECH,HUNGARIAN)	(CET)
*	4-941-548-11	LABEL, CLASS (1)	
	4-991-047-01	LID, BATTERY CASE (for RMT-C305AD)	
	8-917-602-90	REMOCON, RMT-C305AD SET	
	X-3374-593-1	CORD (ANTENNA) ASSY	

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****
HARDWARE LIST
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#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
#2	7-685-247-19	SCREW +KTP 3X10 TYPE2 NON-SLIT
#3	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT
#4	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT
#5	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S
#6	7-685-851-04	SCREW +BVTT 2X4 (S)
#7	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S
#8	7-685-871-01	SCREW +BVTT 3X6 (S)
#9	7-685-645-79	SCREW +P 3X6 TYPE2 NON-SLIT
#10	7-685-158-19	SCREW +P 4X6 TYPE2 NON-SLIT
#11	7-682-554-09	SCREW +B 3X25
#12	7-685-546-19	SCREW +B 3X8

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